

THE BUSINESS, TECHNOLOGY & ART OF ANIMATION AND VFX

August/  
September  
2015

# ANIMATION<sup>TM</sup> MAGAZINE

The Next  
Wave  
of VR at  
SIGGRAPH

PLUS

'Shaun the Sheep  
Movie'

'The Seventh  
Dwarf'

'Dinotrux' on  
Netflix

Google Spotlight  
Stories

VFX of 'Genisys'  
& 'Pixels'

D23 Expo

## THE PROPHET

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**Siggraph Covers:** Streaming platform Toon Goggles reps the next phase of kids' entertainment.

## Emotions in Motion



Creating each issue of *Animation Magazine* is an emotional experience, and this one more than most.

First, there's our cover feature on *Kahlil Gibran's The Prophet*. This is a book that has touched many people in its long life, and I'm no exception having read quotes of its wisdom in my wedding. This adaptation into animation is worthy of the book's reputation, retaining the intelligence and maturity of its source material while also serving as an amazing celebration of animation. It's a movie I think any

animation fan or professional can find something of real value in seeing.

Then we have the sheer charm of the *Shaun the Sheep Movie*. The folks at Aardman show why viewers young and old adore their work.

And this issue we have a lot of awe and wonder, as we head to SIGGRAPH 2015 in Los Angeles for a look into the technology that drives much of the art form. This year's advances are truly pushing the envelope of what you can do with animation, as shown by Ellen Wolff's excellent look at seven top VR companies, our preview of the event and our look into the amazing work BRC Imagination Arts has been putting together for years for custom installations and events. Oh, and there's the next round of projects from Google Spotlight Stories, which we can't wait to see.

For a bit of nostalgia, we let *Terminator Genisys* take us back to 1984 with a digital version of Arnold Schwarzenegger, and we preview D23 Expo and its celebration of the past, present and future of Disney.

All of which makes for great reading, but the real reason I'm going to remember this issue in particular is that my second daughter was born just as we are going to press! No name yet – I'll let you know next issue! – but everyone's healthy and happy at the latest addition to the *Animation Magazine* family.

Lastly, I want to remind everyone that November is sneaking up on us fast, so make your plans now for the World Animation and VFX Summit. Confidentially, the stuff we've got lined up for this year's event is extremely exciting and represents a special opportunity for attendees.

Until next issue,

Tom

Tom McLean  
Editor  
tom@animationmagazine.net

## QUOTE OF THE MONTH

'It kind of bores me that people have just taken historical shows and just gutted it and did a CGI version of it.'

– Nigel Stone, CEO, Platinum Films

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# News & Notes

## PEOPLE

### Movie & TV Animators OK Producers Deal

The Animation Guild, Local 839 IATSE and the Alliance of Motion Picture and Television Producers have agreed to a three-year collective bargaining agreement that took effect Aug. 1 and runs through July 31, 2018.

Key points include a 3 percent increase to contract wage minimums (compounded), unchanged health benefits (including no increases to premiums for dependents), 10 increases in pension benefits for individuals retiring after Aug. 1, an updated New Media Side Letter that conforms to earlier negotiated deals by other groups, and higher health and pension contributions for freelance storyboard artists and timing directors.

The Animation Guild is in collective bargaining agreements with Big Box, DisneyToon, Film Roman, DreamWorks Animation, Fox Television Animation, Hanna-Barbera, Hasbro Studios, Nickelodeon, Sony Pictures Animation, Walt Disney Animation and Warner Bros. Animation.

## FEATURES

### 'Monkey King: Hero Is Back' Sets Chinese Animation Record

An epic animated adventure based on local mythology and directed by a first-time helmer has become the most financially successful Chinese animated film in history. Tian Xiaopeng's *Monkey King: Hero Is Back* has earned 620 million yuan (about



\$99.8 million) as of July 26. This puts it ahead of previous record holder *Kung Fu Panda 2*, which in 2011 grossed 617 million yuan (\$99.3 million).

*Monkey King* took eight years to make for a budget of just \$16 million, with a portion of that raised through government-run crowd-

funding program Internet Plus.

## PEOPLE

### Miyazaki Cancels Retirement Again to Produce Museum Short

Hayao Miyazaki has announced that he is putting his sixth attempt at retirement aside in order to take on his first wholly CG-animated



project.

Miyazaki's new venture, *Kemushi no Boro* (*Boro the Caterpillar*) will be a roughly 10-minute short created to screen exclusively at the Studio Ghibli Museum in Mitaka, Tokyo. The director describes the film as "a story of a tiny, hairy caterpillar, so tiny that it may be easily squished between your fingers." He first noted his concept for the story nearly two decades ago, before *Princess Mononoke* was released. Producer Toshio Suzuki has said *Boro* will take about three years to produce.

## TELEVISION

### Harry Shearer Returns to The Simpsons Cast

Harry Shearer is back on *The Simpsons*. Fox has confirmed that the series main cast is returning for the 27th and 28th seasons of the iconic animated hit, including Dan Castellaneta, Julie Kavner, Nancy Cartwright, Yeardley Smith, Hank Azaria and Shearer, who publicly turned down in May an offer to remain with the show. The signing ensures Shearer will continue to voice such iconic characters as Mr. Burns, Smithers, Ned Flanders and Principal Skinner. The next two seasons of the show – season 27 starts Sept. 27 on Fox – will bring the series' run to 625 episodes, lengthening its already historic run as the longest-running scripted show in TV history.

## FESTIVALS AND EVENTS

### 2015 Ottawa Fest Announces Official Competition Line-Up

Organizers of the 2015 Ottawa International

Animation Festival have unveiled the films in its official competition. Taking place Sept. 16-20, the OIAF will present 79 films representing 23 countries (culled from over 2,000 submissions) in competition, plus 69 additional films screening as part of the Showcase programs. Among the short-films highlights attendees can look forward to are: Theodore Ushev's *Sonambulo*, Adam Elliot's *Ernie Biscuit*, Don Hertzfeldt's *World of Tomorrow*, Ely Dagher's Palme d'Or winner *Waves '98*, Sylvain Chomet's *Simpsons Couch Gag* and *Stromae: Carmen* and 2014 Oscar nominee *A Single Life* by Job, Joris & Marieke.

## FEATURES

### Iron Giant: Signature Edition Gets Limited Fall Re-Release

Warner Bros. will be bringing Brad Bird's 1999 animated family adventure *The Iron Giant* back to the big screen this fall, re-mastered and enhanced with two all-new scenes as *The Iron Giant: Signature Edition*.

The limited theatrical engagement is being handled by Fathom Events, kicking off with a special event screening Sept. 30 at 7 p.m., with an encore matinee event in select markets Oct. 4 at noon.



Ticket on-sale dates and theater locations will be announced at fathomevents.com. Following the theatrical re-release, a high-definition version of the new edition will be available through digital retailers.

## TELEVISION

### Thunderbird Films Acquires Vancouver's Atomic Cartoons

TV and film producer and distributor Thunderbird Films has acquired Vancouver-based Atomic Cartoons. Atomic founders/partners Mauro Casalese, Rob Davies, Trevor Bentley and Rob Simmons will continue to lead their teams. Since being established 16 years ago, Atomic Cartoons has become well known for its work for clients such as Nelvana, Marvel Animation,



eOne, Nickelodeon and Cartoon Network, as well as original series including *Pirate Express* and *Atomic Betty*, which has been seen in 180-plus territories and garnered honors from the Annie, Leo, CSA and BAFTA awards.

## FESTS AND EVENTS

### 'Saga,' 'Lumberjanes,' 'Nemo'

#### Top Eisner Award Winners

*Saga*, *Lumberjanes* and various incarnations of Winsor McCay's *Little Nemo* were the top honorees at the 2015 Will Eisner Comic Industry Awards, presented July 10 at Comic-Con International: San Diego. *Saga*, published by Image Comics, and *Lumberjanes*, by Boom! Box, each won two awards. *Saga* won Best Continuing Series and Best Penciller/Inker for Fiona Staples. *Lumberjanes* won for Best New Series and Best Publication for Teens. Three *Little Nemo* projects won four Eisners overall, with the all-new *Little Nemo: Dream Another Dream*, published by Locust Moon, winning Best Anthology and Best Publication Design; *Little Nemo: Return to Slumberland*, published by IDW, won Best Limited Series; and Winsor McCay's *Complete Little Nemo*, published by Taschen, won Best Archival Collection/Project – Comic Strips at Least 20 Years Old.

The top award of the night, for Best Graphic Album–New, went to *This One Summer*, by cousins Mariko and Jillian Tamaki (published by First Second).

The publisher with the most wins was Dark Horse, with four plus one shared; IDW took home three awards, and First Second had two plus one shared. Four companies (BOOM!, DC, Image, and Locust Moon) had two winners.

## IN BRIEF

After over two decades based in Sunnyvale, Calif., Cogswell College has moved to San Jose. The school serves some 600 students and offers a curriculum fusing digital art, engineering and entrepreneurship. ... Turner Broadcasting and Warner Bros. announced a global agreement to strengthen the pipeline of original content being developed for the recently rebranded Boomerang. The agreement – the first-ever deal for original content developed exclusively for Boomerang – includes nearly 450 half-hours of programming from Warner Bros. Animation. Original shows in the slate include *Bunnicula*, *Be Cool Scooby-Doo!* and *Wabbit – A Looney Tunes Production*. ... Netflix is adding

three new preschool animated series: *Word Party*, *Kazoops!* and *True & the Rainbow Kingdom*. ... Cinesite and Image Engine have announced a merger of their two companies, which now employ a combined staff of over 525 artists worldwide, with capacity for 675 at their studios in London, Vancouver and Montréal. ... The newly reinvented nonprofit Animation Show of Shows has wrapped up the Kickstarter campaign for its next installment, hitting its minimum funding goal with one day to spare and winding up over its “stretch” goal with \$107,528 pledged by 858 backers. The initial \$100k will fund the 17th edition of Ron Diamond's acclaimed cartoon shorts celebration, with the seven grand bonus earmarked to restore Les Goldman and Paul Julian's powerful 1964 adaptation of *The Hangman*, penned by poet Maurice Ogden. ... Cartoon Network has renewed its orders for the original series *Adventure Time*, *Regular Show*, *Steven Universe*, *Uncle Grandpa* and *Clarence*. ... Trey Parker and Matt Stone reached a new deal with Comedy Central to extend *South*



*Park* by three seasons and 30 episodes, taking the longest-running primetime scripted series in cable to its 23<sup>rd</sup> season and 304 episodes. ... 9 Story Media Group has licensed three animated kids' programs to Hulu in the U.S.: *Get Ace*, *Nerds and Monsters* and *Joe and Jack*. ... Atomic Cartoons will be developing Lunch Media's *Mariachi Zombie* as an animated comedy series for kids ages 7 to 11. ... Corus Entertainment's Nelvana is developing a new animated TV series based on Sony Pictures Animation's CG feature, *Hotel Transylvania*. The show will focus on the teen years of Dracula's daughter, Mavis, and her friends. ... South Africa's Triggerfish Animation Studios will launch The Triggerfish Story Lab with the support of Disney and the country's Department of Trade and Industry. Triggerfish will invest up to \$3.5 million into the Story Lab over the next three years. The program is designed to give African storytellers and filmmakers the opportunities to develop their ideas with the guidance of the studio's international network of mentors, with an eye to expanding the studio's TV and feature portfolio. ... Set to follow the highly anticipated release of *Blinky*

*Bill The Movie* this September, Seven Network Australia will be bringing a new *Blinky Bill* series to TV screens in 2016. ... London-based Cake has appointed Chapman Entertainment's former director of production & development Emily Whinnett as its new VP - Creative. ... Saban Brands named Janet Hsu as its first-ever chief creative officer, effective Aug. 17. ... Nickelodeon appointed James Stephenson to the newly created position of Senior Vice President, Animation and Games. ... Sony Pictures Animation has triumphed in a three-studio auction for an animated feature pitch inspired by those lovable 21st century pictographs: the Emoji. SPA has signed a deal with pitchman and director Anthony Leondis to co-write the project with Eric Siegel. ... Beijing-based studio Light Chaser Animation's first feature film, *Little Door Gods*, will arrive in Chinese theaters on Jan. 1. ... Butch Hartman, creator of hit animated series *Fairly OddParents*, *Danny Phantom* and *T.U.F.F. Puppy*, has thrown his hat into the digital applications ring by launching The Noog Network on the Apple App Store. The interactive world features kid-friendly original games, animation and live-action content including shows, behind-the-scenes featurettes and music videos. ... Technicolor is expanding its animation and games division with the appointment of Sean Mullen as creative director and David Kern as games technical director. Mullen and Kern will be based at Technicolor's animation studio in Bangalore, India. ... Netflix has announced premiere dates for a new grownup toon called *F is for Family* from comedian Bill Burr, season three of *BoJack Horseman* and animated offerings *Dinotrux*, *Puffin Rock*, *Popples*, *Care Bears & Cousins* and *Way Too Wonderland*.

## PASSINGS

Animator and children's book artist **Jane Aaron**, who is best known for creating dozens of animated shorts for *Sesame Street*, died June 27 from cancer in New York City. She was 67.

Voice actor **George Coe**, whose extensive credits include voicing Woodhouse on the FX animated series *Archer*, died July 18. He was 86.

Animator, sculptor and Disney Legend **Blaine Gibson**, one-time head of the sculpture department at the precursor to Walt Disney Imagineering, died July 5. He was 97.

Nintendo president **Satoru Iwata** died July 11 at age 55.

Toei Animation managing director **Hiroyuki Kinoshita** died July 3 from a heart attack. He was 48. ☞

# August | September Planner

August

4

Today's home entertainment releases: **Looney Tunes: Rabbits Run**, **Alpha & Omega: Family Vacation**, **Madeline: The Complete Collection** and **Pixies**.



18

New on disc: **Walt Disney Animation Studios Short Films Collection** Blu-ray, **The Seventh Dwarf**, **Batman Unlimited: Monster Mayhem** and **Teen Titans Go! House Pests**.



25

More midsummer DVDs come out today: **LEGO DC Super Heroes: Justice League - Attack of the Legion of Doom** and **Two by Two: God's Little Creatures**.



5

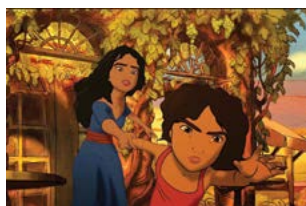
Things get wild and woolly in the Big City in Aardman's **Shaun the Sheep Movie**.

In Germany, **gamescom** showcases the latest in gaming for five days. [gamescom-cologne.com]



7

Check out Salma Hayek's collaborative animated take on **The Prophet** and the rebooted **Fantastic Four** in theaters today.



8

**Tom & Jerry** director **Gene Deitch** is 91 years young today!



9-13

The 42nd **SIGGRAPH** confab takes over the Los Angeles Convention Center. [s2015.siggraph.org]

September

1

Pick up **Star Wars Rebels: Complete Season One**, **LEGO: Legends of Chima: Legend of the Fire Chi** and **Alpha & Omega: The Legend of the Saw Tooth Cave** today.



8

New DVDs: **Over the Garden Wall**, **Transformers Prime: Ultimate Decepticons** and **Ranma 1/2 Set 7**.



9-13

Pixelatl presents **El Festival** and Ideatoon in Cuernavaca, Mexico. [elfestival.mx/eng]



13

Happy birthday to **Don Bluth**!



15

**Peanuts Emmy Honored Collection**, **Teenage Mutant Ninja Turtles: The Shredder Strikes!** & **Meet Casey Jones!** and **Clarence: Dust Buddies** are out today.



15-18

Buyers and producers converge on Toulouse, France for **Cartoon Forum**. [cartoon-media.eu]



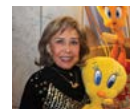
16-20

Take in over 100 buzz-worthy shorts during **Ottawa Int'l Animation Festival** in the Canadian capital. [animationfestival.ca]



18

The unstoppable **June Foray** celebrates her birthday today!



22

New on disc: **The Adventures of SpongeBob SquarePants** and **JoJo's Bizarre Adventure: The Complete First Season**.



29

**My Little Pony Friendship Is Magic: Games Ponies Play** and **Bleach Uncut Set 26** hit shelves.



To get your company's events and products listed in this monthly calendar, please e-mail [mercedes@animationmagazine.net](mailto:mercedes@animationmagazine.net).



# Books We Love

## The Art of Hotel Transylvania 2

By Brett Rector

[Cameron + Company, \$29.99]

Out August 25, this hardcover collection showcases the colorful, expertly crafted art behind Sony Pictures Animation monster-mash sequel. *Hotel Transylvania 2*, once again directed by toon legend Genndy Tartakovsky and written by Robert Smigel, introduces Dracula's ancient vampire dad Vlad (voiced by Mel Brooks), who arrives at the hotel for a last ditch effort at bringing out Drac's half-human grandson's inner monster.



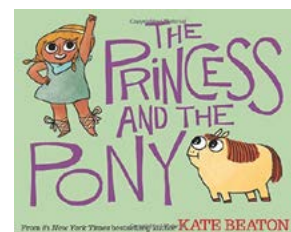
Tartakovsky provides an insightful foreword for this 160-page journey behind the scenes. Author Brett Rector brings his extensive experience both as a LucasArts producer and as a writer and editor, having co-authored *The Art and Making of Star Wars: The Force Unleashed* and served as editor-in-chief of *Star Wars Insider* magazine. Fans of classic cartooning and state of the art CG artistry will both enjoy poring over this presentation in advance of the film's September 25 debut.

## The Princess and the Pony

By Kate Beaton

[Arthur A. Levine Books, \$17.99]

At long last, the first children's picture book from the creator of webcomic sensation *Hark! A Vagrant* has arrived, and Beaton's offbeat princess is winning over readers of all ages. Aimed at youngsters, the tale centers on Princess Pinecone, the smallest warrior in her kingdom with the most gung-ho attitude. When she asks for a mighty battle horse for her birthday, she ends up with a blank-eyed, chubby, gassy little pony. (Don't worry: the unlikely duo end up saving the day.) This mold-breaking storybook showcases Beaton's distinct sense of humor and playful language while offering plenty of visual gems to be discovered during repeat reads. While you're at it, be sure to pre-order the second *Hark! A Vagrant* collection, *Step Aside, Pops*, which will be available to delight the grown-ups in September.

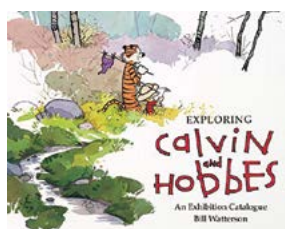


## Exploring Calvin and Hobbes: An Exhibition Catalogue

By Bill Watterson

[Andrews McMeel Pub., \$19.99]

Prepared as the companion catalog for the 2014 exhibition at Ohio State's Billy Ireland Cartoon Library & Museum, *Exploring Calvin and Hobbes* is Watterson's personally curated journey through the creation and legacy of his iconic comic strip. The paperback volume boasts original art from the strip, along with Watterson's commentary. The show also included art from the comics and artists that influenced Watterson, like *Peanuts*, *Pogo*, *Krazy Kat*, *Doonesbury*, Pat Oliphant, Jim Borgman, *Flash Gordon*, *Bloom County* and Steadman. Jam packed with artwork (mostly black and white, but some delicious full color pieces as well) on quality paper, the pith of the catalog is an extensive interview with the notoriously private Watterson conducted by exhibition curator Jenny Robb.

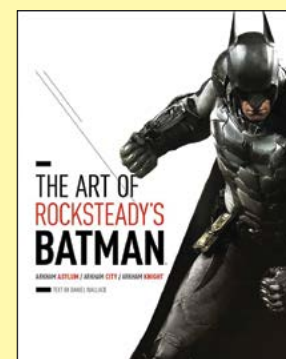


## The Art of Rocksteady's Batman

By Daniel Wallace

[Harry N. Abrams, \$40]

Rocksteady Studios has put together the first official look behind the scenes of its critically acclaimed, bestselling *Batman* videogame franchise. DC Comics' Dark Knight and the crime-riddled world of Gotham leap from 300-some pages full of the studio's best character sketches, concept art pieces, background paintings and more from the production of *Arkham Asylum*, *Arkham City* and *Arkham Knight*. The hardcover takes fans through every stage of the creative process behind these darkly adrenaline-fueled adventures, with key creative and development team members offering commentary through exclusive interviews about the last seven years of revamping the Bat Man for a modern gaming audience. Author Wallace is the perfect guide for this journey, as a lifelong and professional devotee of the comic-book and sci-fi underworlds who has penned over two dozen previous odes to nerd culture.



—Mercedes Milligan



# Artists United

Indie animators bring their unique styles to one of the world's most famous works of poetry in Kahlil Gibran's *The Prophet*. By Tom McLean

**K**ahlil Gibran's *The Prophet* is one of the most popular books ever published; its 26 poems on the human condition and finding peace in life have been cited, quoted and used in countless wedding ceremonies since its 1923 publication. Adapting the work into a movie has always been challenging, given the slowness of the narrative the Lebanese writer used to connect his poetic observations and the abstract nature of his themes.

But animation has provided a unique solution to that problem, and the result arrives Aug. 7 for a limited release in U.S. theaters via GKIDS as a feature that includes segments animated by some of the most renowned independent animators in the world.

Spearheaded as a passion project by actress and producer Salma Hayek, *Kahlil Gibran's The Prophet* was conceived by producers Clark Peterson and Steve Hanson along the lines of Walt Disney's 1940 musical classic *Fantasia*. Roger Allers, whose directing credits include *The Lion King* and *Open Season*, oversaw the overall adaptation and wrote and directed the framing sequence, while segments on the individual poems

were animated by Paul and Gaetan Brizzi, Joan C. Gatz, Mohammed Saeed Harib, Tomm Moore, Nina Paley, Bill Plympton, Joann Sfar and Michal Socha.

The project was several years in the making before production kicked off with the arrival of Allers, who said adapting the book was an opportunity he could not pass up.

"The book meant a lot to me in college and I didn't want to let it get away," he says. "I had no idea how I was going to adapt it at all, I just knew I had to do it."

Adapting Gibran's book was far from an easy task, says Allers. The story in Gibran's book is slim, consisting solely of a man who is ready to return to his home country after many years and speaks on various topics to the people he sees on his way to the ship.

Allers fleshed out that idea to make Gibran's hero, Mustafa, an artist under house arrest who is being allowed to return home. Cared for by a woman who comes to clean his house and her curious and rebellious daughter, Almitra, the guards arrive to escort him to the port and he makes stops along the way to say goodbye and

speak to people, leading into the individual animators' segments. The voice cast includes Liam Neeson as Mustafa, Hayek as Kamila, Quvenzhené Wallis as Almitra, John Krasinski as Hayim, Alfred Molina as Sergeant and Frank Langella as Pasha.

"It was really about honoring what (Gibran) had, but expanding it so that there would be a narrative that would help the movie audience travel through all these poems and travel through the film," he says. "I read as much about Gibran as I could and went back and dipped into the poems and started asking myself questions about Gibran's hero, questions I feel he didn't answer in his book, and that's how it opened up."

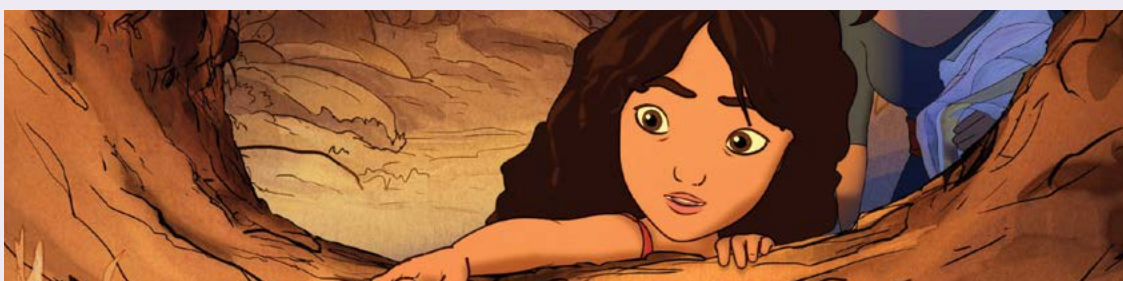
## A New Point of View

Hayek's involvement was considerable, as she suggested making Almitra a child to open up the movie to a young audience, Allers says. "She thought that a child's point of view would help involve the young audience, as I said. She has a young daughter, so really, the Brizzis and I were quite inspired by the two of them (mother and daughter) to base our characters on them, story





Roger Allers directed the framing sequence of Kahlil Gibran's *The Prophet*, opposite and bottom right; Tomm Moore's segment on love involved Celtic designs and dance, top right.



and design-wise."

Meanwhile, the producers had spent years lining up and getting commitments from a dream team of independent animators.

"I was at a party at Ron Diamond's house and Ron Senkowski, who is one of the producers on the project, said I've been looking for you and he mentioned this project," says Gratz, who animated the segment on work. "It was one of those things that sounded like a great project and so nice to be able to do a short part of a feature film, which usually doesn't happen – or you're doing it in someone else's style – and so it was a unique opportunity to do a film in my style."

The animators were asked which segment they would like to work on and were asked to submit storyboards, which was an unusual request in some cases.

"I am super independent and work on my own," says Paley, best known for animating the feature *Sita*

*Sings the Blues*. "I don't do storyboards. I don't do treatments. Because I work by myself, there's a whole lot of intra-production work that I just don't do. So the biggest challenge for me was making something digestible to an actual Hollywood production."

Allers says he offered some notes at the start but kept it minimal. "The whole idea was to just let everyone do their work, be who they are and

express their own vision," he says.

"I picked the chapter on work because that was the one I most closely identified with, especially as an animator, where it's so labor intensive," says Gratz. "That was kind of a chapter that really spoke to me."

"Painting with clay" is how Gratz describes her technique, in which she creates images using modeling clay that's been thinned with oil to make it workable like oil paint but without colors running together. "When I first started doing this technique, I was working with oils and everything would start out colorful and then as you mixed more and more stuff together everything turned out to be brown, so with clay you don't have that same problem."

"I had no idea how I was going to adapt it at all, I just knew I had to do it."

– Roger Allers, writer and director, Kahlil Gibran's *The Prophet*

Gratz typically improvises her work but decided to incorporate some imagery from Gibran's artwork. "I really tried to incorporate as much of his own work as I could within that four-minute piece," she says.

She spent six or seven months animating the four-minute piece, which she says is fast for her. "That's the beauty of my technique, is no one else can do it," she says.

Moore chose the segment on love and came up with a dance idea that he had to modify.

"I found out Joann Sfar was also doing something with dance, so I knew we could use it as part of our idea but we didn't want to go completely based on the dance," he says.

Moore says the crew hired a couple of dancers and videotaped their performance for reference, but ended up going for a more stylized approach.

### Moore Multitasks

He was working on the segment at the same time as he was directing *Song of the Sea* at Cartoon Saloon in Kilkenny, Ireland, which was stressful but also allowed him to tap into the talent assembled for the feature.

"It was a really intense period, but I didn't want to miss a chance to be part of the project," says Moore, who would spend mornings on *The Prophet*,

then hand it off to his colleague Ross Stewart and move on to *Song* in the afternoons. "An awful lot of the artists who worked on it were people at Cartoon Saloon who were either coming off *Song of the Sea* or going on to the project afterwards, so it was quite nice that way."

Typically for Moore, he tried to get some Celtic mythology into his pitch, with one version based on transformation and using imagery of swans.



Liam Neeson voiced Mustafa, the main character of the adaptation; below is an image from Nina Paley's segment on children.

He also strived to put extra details into the segment, despite it being short.

"We did a lot of experimenting to find ways to animate the background, to do stuff animated by hand and added in with the compositing software."

Paley chose the segment on children and her original idea for a more metaphoric take was changed at the producers' request to be more literal. She settled on imagery from the poem of an archer shooting new lives as the main element and pulled imagery from the ancient Phoenician artwork at Levant for the visuals.

Since her segment also was set to music, she was sure to communicate with the songwriter to ensure the tune was animation friendly. "A lot of time, the beats will be every seven frames or every 13½ frames, so communicating directly with him he made it into a nice beat that I could divide into 24 frames per second."

### Grounding the Emotion

Pulling all of this together was Allers, who decided to make his own sequences grounded and earthy as a way to offset the stylization and colors of the poem segments. "I thought that we were going to need a visual rest in between," he says. "It was like if these poems were dreams it would be like coming back to earth."

He chose a traditional 2D approach and worked with the Brizzis, who storyboarded Allers' segments in addition to directing their own segment in the film. Allers worked remotely via

Skype with both his crew and with the other animators.

The animation was done at Bardel Entertainment in Vancouver, with CG technology used to complete the film within the limits of its schedule and budget.

"We started off doing it as a hand-drawn film with hand-painted backgrounds, basically. We kept the style, we kept the backgrounds, but we shipped it to CG because of the time constraint and reinterpreted all these graphic character designs into 3D models," Allers says. "And then it went through a process called toon shading where we would flatten them back out after they were animated and then have traditional animators go over that as well and refine and embellish. It was a very strange, hybrid technique and it was risky because none of us knew it was going to turn out as well as it did."

The project nonetheless required a fair bit of improvisation, especially when it came to effectively integrating the various segments into a whole.

"Because we were developing all these things simultaneously, I didn't know where some of my scenes were going to end," Allers says. "You just had to figure things out in the moment."

Despite the years of organizing and preparation, production moved quickly once it started. "From me sitting down and trying to come up with a concept to the last bit of post production, it was really only about a little over two years,"



Allers says.

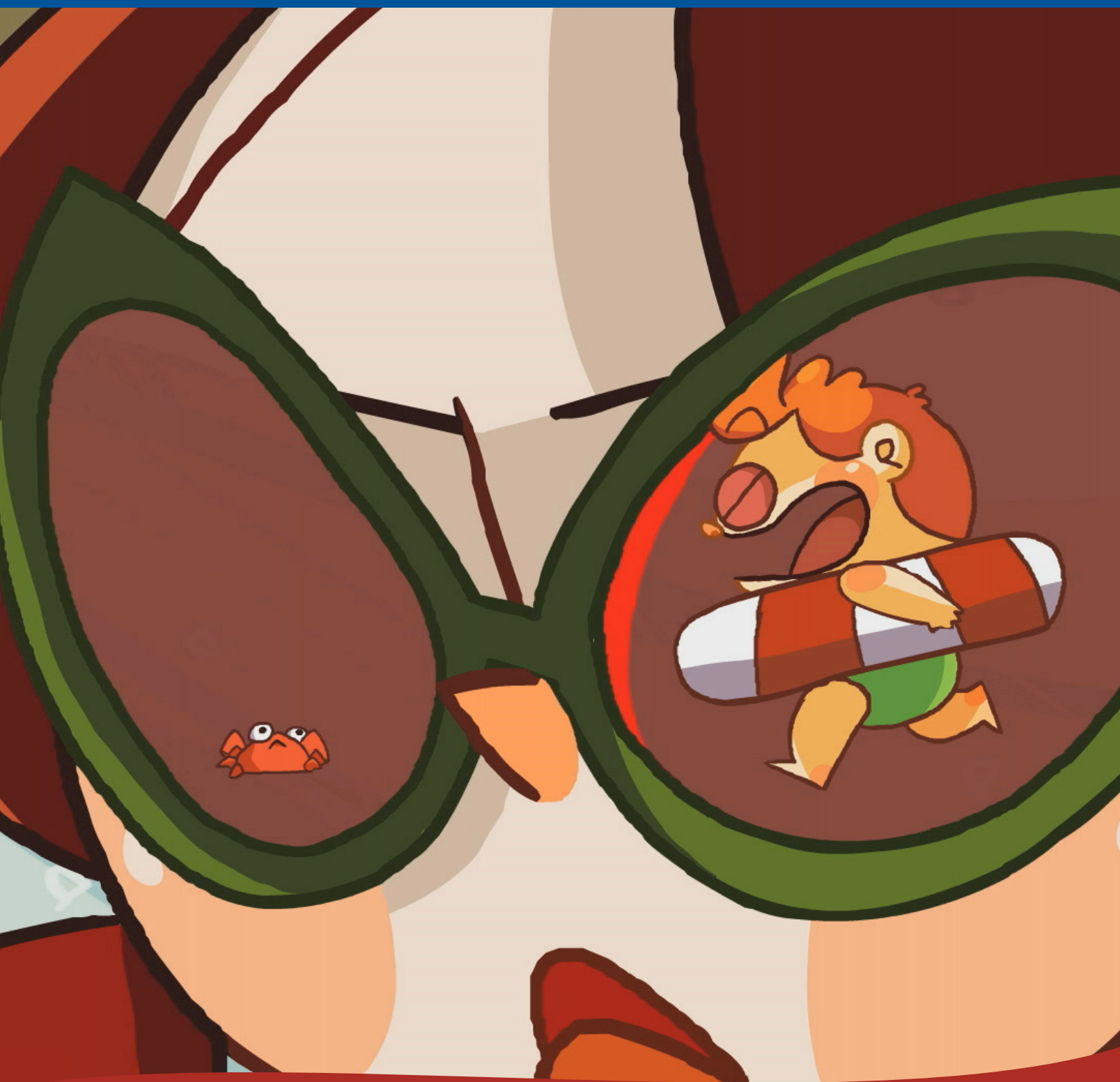
The final result has earned significant attention, including a preview last year at Cannes and a premiere at the Toronto Film Festival before its roll-out this summer to general audiences.

Allers says he hopes the movie works for readers already familiar with Gibran and opens up his work for a new generation that is unfamiliar with it.

The film itself, meanwhile, stands as an example of the maturity of animation and its ability to tell stories no other medium can in distinct individual styles that has an aggregate power surprising even to its creators.

"It ended up having a kind of emotional power that I don't remember putting there," says Paley. "I just put things in and it kind of said something and whatever it says was really bypassing my conscious mind." ☸





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# A Woolly Big Adventure

***Shaun the Sheep Movie* launches Aardman's mischievous star on his biggest adventure yet, no baas about it.**

**By Mercedes Milligan & Tom McLean**

**E**ver since launching his TV series in the U.K. back in 2007, Shaun the exceptionally clever sheep has been winning over audiences all over the world with his slap-

stick misadventures on the farm. Now, Nick Park's charming little scamp has made his triumphant feature debut in Aardman Animations' *Shaun the Sheep Movie*, opening in U.S. theaters August 5.

Directed by series veteran Richard Starzak and accomplished screenwriter Mark Burton (*Madagascar*, *Wallace and Gromit: The Curse of the Were-Rabbit*), the movie kicks off when another of Shaun's schemes to shirk his boring chores goes awry, leading to an epic quest to shepherd his flock (and farmer) back to the farm from the bustling big city. In addition to the world-renowned stop-motion Aardman animation on display, *Shaun the Sheep Movie* is remarkable for having no dialog to help spur on the 85-minute adventure.

"[Richard] wanted to make a movie without any dialog ... this sounded like such a crazy idea that I had to be a part of it," says first-time director Burton. "It's probably going to go real-

ly, really well or really, really badly. But, it felt like a really interesting challenge, particularly for a screenwriter."

## Making the Leap

Starzak, who helped develop the *Shaun* series and served as a director and writer on the series, says he started "pestering" Aardman about turning it into a movie years ago. He and Burton decided early on they wanted to maintain the style of the show by using as little CG as possible, but they also knew that to take a seven-minutes series and turn it into a feature length film would require a strong, emotional story at the core and fresh scenery.

The main solutions they came up with were to delve deeper into Shaun's relationship with the Farmer, giving the duo a sort of family, father-son dynamic. To open up the world for Shaun and his flock, they decided to contrast his country home with an on-the-go modern





city. "That was kind of the bedrock of it," says Burton. "Then we just chucked a lot of silly ideas around."

"Because we chose a no-dialog route for the series, and because I was effectively working with a feature crew on the series ... in a sense, we were kind of making mini films already," says Starzak. "I sort of felt that *Shaun* as a series was sort of punching above its weight, so as a feature it was great to have that canvas, and to have that time – especially with no dialog – to get into the storytelling in a big way."

### Shear Quality

To tackle the dialog-free story, Burton prepared a conventional, if extremely dense, script in order to provide some structure for the storyboard team to work from. The 'boarding phase, while always important to the animation process, was especially critical on this project. The *Shaun* movie was an interesting introduction to directing for Burton, who credits Starzak and the rest of the highly experienced Aardman crew for handling the technical aspects so smoothly it allowed him to really focus on telling the story in the best way possible.

Starzak and Burton divided up the scenes. The physical realities of working in stop-motion meant that they couldn't be taking up space on the same sets. The directing duo would discuss how to approach each scene ahead of time, with Starzak offering insight from his years of experience working with the process.

"What I like about stop-frame is, it's got limitations, and I think in the early days that was quite helpful to Mark, in that I could make a good stab at what would work and what wouldn't in stop-frame," says Starzak. "It's nice to have limitations, I think, because it forces you to think more in terms of storytelling – how do you put this information over, how



do you show this?"

Burton notes that though the film begins on the farm with sets very similar to those used for the series ("Maybe we spent a bit more money on the grass and things," he admits), much of the budget was spent on creating the large physical sets for the city. "There were occasions where you wanted to do a big, swooping shot and the camera would just bump the ceiling of the studio, and that's as far as you could go ... You can't just press a button on a computer and it expands infinitely."

A major departure from the series is the amount of crowd scenes in the film. According

to the directors, *Shaun* set an Aardman record by having a scene that involved nearly 50 puppets, shot by one animator over a matter of weeks. "We had a cast of 'extras' that were actually, physically made, and we had to cycle them out," says Burton. "You kind of had to keep an eye out that we didn't have the same bloke with a hat walking past in every shot."

There were between 16 and 20 animators working on active sets at any point during production, working at an unusually rapid feature pace to create about two seconds of animation a day. This was necessary to keep up with the quite short 10-month production timeline. Ultimately, the crew created the film with roughly half the crew (approximately 120 people, not including post-production) and in half the time as other Aardman films. However, many of the animators came over from the series where they are expected to bust out five or six seconds a day.

The two-man team says they are satisfied with the end result, which has been widely lauded by critics and theatergoers. In fact, there is already sequel talk buzzing around the studio. "Very early, me and Richard sat down and said, OK, we're going to do it this way, and we want it to be funny and we want it to be emotional," says Burton. "And, in the end, I think we achieved those things."

"What was quite interesting to me is that people [at the screenings] said the young kids took fewer toilet breaks," Starzak notes. "Which I took as sort of a compliment." ☺



The *Shaun* movie stays true to the series, while beefing up the characters' relationships and expanding their stop-frame world.





# Lucky Number Seven

German producers break the global comedy barrier with animation in *The Seventh Dwarf*. By Mercedes Milligan

“It seems that the German sense of humor is not very famous in the world,” says writer-producer Daniel Welbat. He is explaining why, despite becoming a major hit in the Vaterland, his 2003 live-action project couldn’t seem to translate to a global success. It was then that he began to think about creating an animated version of the story – a comedic take on the classic Seven Dwarves.

Over a decade later, U.S. audiences can check out *The Seventh Dwarf* for themselves. The CG feature was produced for the English market with a cast that includes Peyton List, Norm Macdonald, Nina Hagen and Joshua Graham. The fairytale mash-up musical got a special theatrical run in New York and L.A. in late July, and is available on Blu-ray, DVD and VOD from Shout! Factory August 18.

The magical mayhem begins on the eve of Princess Rose’s 18th birthday, when everyone in the kingdom – including Cinderella, Red Riding Hood and Snow White and the Seven Dwarfs – makes their way to Fantabularasa Castle to celebrate. When Bobo, the youngest dwarf, accidentally pricks Princess Rose with a cursed needle and sends the kingdom into a 100-year siesta, it’s up to the dwarves to find Rose’s true love, battle a fiery dragon and outwit a scheming witch to break the spell.

Welbat admits that his first foray into ani-

mation was extremely challenging. But his production experience allowed him to assemble a crack team of local animation talent, including the experienced key-frame CG animators at Trixter, and Hollywood character designer Harald Siepermann, who was instrumental in fine-tuning the final storyline and made his directorial debut with *The Seventh Dwarf*.

In addition to coming up with little Bobo’s relationship with the big ol’ dragon as a key plot point, Siepermann was also crucial to the character design process. Welbat knew to appeal to an international audience, the dwarves needed to be cute and relatable. But the German version was voiced by very popular local comedians, so he wanted that audience to be able to relate the dwarves to their famous voices. It was a tricky balancing act.

“To handle this, we needed Harald. And Harald was the man who did it ... he gave the movie his certain, unique look,” says Welbat. “I was very happy that I was the first producer who said, OK Har-

ald, it’s time ... do you want to be a director?”

Sadly, a few months into production, Siepermann was diagnosed with late stage liver cancer. A true professional, the director continued to pour all the energy left to him during his treatment into the movie. “It was a very intense, terrible experience. We became closest friends in this time,” Welbat was in Toronto beginning voiceover recordings when he got the news that his director and friend was near the end. “That was one of the most emotional moments of my life. When he died, I decided not to ask another director to complete the movie.”

Despite this great personal and professional tragedy, and production delays due to financing unexpectedly falling through, Welbat and his team pulled through the two year production process with a strong result. *The Seventh Dwarf* has been a big success in Germany despite a smaller stereo 3D release. The film has also proven a hit in Russia, Poland and Italy, Welbat says, and has sold to 80 different territories worldwide.

“It was like being in a train going 200 kilometers per hour to the next station, but there was no track, so we had to chop down the trees to build the track to reach the station,” says Welbat. “We assembled the best animation artists in Germany .... We made a lot of mistakes, and it cost me a fortune – but, finally, I think we have a very good movie.”







# Building a Mashup

DreamWorks mixes vehicles and dinosaurs for *Dinotrux*, the first original series under its Netflix deal. By Tom McLean

**M**ashing up dinosaurs and trucks – two perennial favorites with kids – seems like an instant winner of an idea for an animated show. But for Ron Burch and David Kidd, the executive producers of *Dinotrux*, a new DreamWorks Animation Television series debuting Aug. 14 on Netflix, the series needed to dig deeper to hit home with kids.

"We do see them as mini movies," says Burch of the show, which is the first completely original series the studio has created for Netflix. "And we score them that way and we mix them that way and we feel that the shows have all the elements you should get in a good movie: action, heart and a little bit of comedy."

Kidd adds that the characters – each of which is based on both a real dinosaur and a real construction vehicle – have distinct personalities. "Their very silhouettes began to dictate character to us," he says.

Based on the popular children's book series by Chris Gall, *Dinotrux* is set in the "Mechazoic era," where dinosaurs keep to their species-specific herds, the series follows a Tyrannosaurus Trux named Ty, who befriends a Reptool named Revvit. Together they demonstrate to other Dinotrux the power of working together as they fend off the threat of D-Structs.

"What we liked about this is it combined a lot of different ideas, like dinosaurs being the superheroes of the animal world because they controlled the planet for hundreds of millions of years, and

construction vehicles being the superheroes of the vehicular world," says Kidd. "So you combine those two, suddenly you begin to think about teams, you begin to think about things like the Avengers."

The experience of the characters also mirrors in many ways the lives of the kids aged 4-6 who are the show's target audience. "They all live in herds, family herds, then they all go off to school or preschool and they have to mix with new creatures, new kids, from different herds and they have to figure out how to get along, how to work together," says Kidd.

Burch says they decided to keep the show as grounded in reality as possible. "We obey the laws of physics; we try to keep it as real as we can, given our world," he says.

"We decided to start with a world that would look and feel very much like the real world," says Kidd.

That extends to character design, too. "We felt that the truer the characters looked to the construction vehicle and to the dinosaur, the more real

they would seem," Burch says. "Which means that all the characters are made of metal, all of the parts are rigid and any flexibility comes from mechanics, not from a kind of cartoony bendish-ness."

Of course, while that created a terrific look, it also created enormous challenges for the animators.

"What the animators have been able to do is sort of remarkable," says Burch. "Using a lot of eye acting and larger gestures that cover whole bodies, they've pulled off this kind of miracle of getting emotion out of what are ostensibly mechanical characters with fewer options than even, say, a Muppet."

Such limits have technical benefits, as more bandwidth can be devoted to creating the look of the world and the characters themselves instead of in complicated facial controls or rendering cloth, hair or skin.

The Netflix model has worked well for the show-runners. Being able to plan out an entire season without waiting for a backend pickup has its benefits, as does releasing episodes in occasional batches instead of a weekly timeslot.

"We get to live with our shows for a longer period of time because we drop 10 or 13 episodes on Netflix in a bunch," says Kidd.

"We pick goals and we work toward them and we're also trying to keep a balance between action, comedy and heart in every single episode, but also over the course of the whole season," says Burch. ☞



# Trusting the Audience

Amazon Studios and Angela Santomero use the Internet giant's development methods to bring *Wishenpoof!* to vibrant life. By Tom McLean.



Removing the barriers to making animated content for today's youngest audience is one of many reasons Angela Santomero, co-creator and producer of such iconic preschooler hits as *Blue's Clues*, *Super Why!* and *The WotWots*, reteamed with Amazon Studios for her new series *Wishenpoof!*

This is Santomero's second series for the content division of the giant Internet retailer, after *Creative Galaxy*, which has been renewed for a second season. Like many content producers with Internet origins, Amazon Studios has its own approach, which Santomero says was a key reason in placing *Wishenpoof!* with the studio.

"It almost feels like a smaller studio in that sense of being able to work directly with someone who can make all the decisions, as much as possible," says Santomero. "Decisions have been able to be made a little quicker and the turnaround is quicker and since our schedules are really fast that really helps."

Amazon Studios' head of kids programming Tara Sorensen says the admiration is reciprocal. "We had a really wonderful time working with her (on *Creative Galaxy*), understanding her process and how it was so customer-focused, which is very in line with Amazon Studios," she says.

The Amazon Studios process stands out for its transparency, with creators submitting their development materials to input and reaction from the studio and the public. The pilot for *Wishenpoof!* began streaming on Amazon Prime Instant Video early in 2014, with the first season of episodes set to begin streaming on the service Aug. 14.

Created by Santomero, produced by her Out of the Blue Enterprises and animated by DHX Media in Canada, *Wishenpoof!* is about a young girl named Bianca, who has "wish magic," and uses it to help others and to learn to solve problems.

## A Well-Read Girl

Santomero says the character of Bianca was a key inspiration, incorporating ideas from the books *Mind in the Making* by Ellen Galinsky and *Redefining Girly* by Melissa Atkins Wardy. "She can be a girly girl," says Santomero. "She could wear her high-cut sneakers but also have a tutu on, and that's OK."

In deciding to go with 3D CG animation, Santomero says she wanted it to look doll-like – as though viewers could literally play with the characters. "When you see Bianca you see the hair movement, and we paid a lot of attention to that in development," she says.

With Bianca traveling between the real world and "wish world," there also was a need to differentiate those settings. "With wish world, we needed to pump up that level of fantasy in a very rich, beautiful way, so you can feel like you can walk into that world and you want to stay there," Santomero says.

Releasing the pilot first was a bit "unnerving," Santomero says, but it was enlightening as well, allowing for a format switch from an 11-minute show to 22 minutes. The extra time was used to add a music-video sequence to each episode and allowed the show to dig in to its narrative, explore the characters and add comedy.

That was one example of the collaborative

nature of Santomero's relationship with Sorensen, who says the decision was based on feedback from customers and a better understanding of Santomero's goals for the series. "It really allowed the show to breathe," she says. "It really allowed Bianca to have these more playful moments and really sort of work with her wish magic, but it also, I think, allowed us to drill down deeper into the essential skills."

## Customer Service

Audience response to the relationship between the parents and to the character of Bianca was helpful.

"There is sometimes a piece of feedback that maybe producers are unaware of, so we're trying to steer them toward what works for our customers, but really still allowing them to maintain their creative vision," says Sorensen.

And it's a process Amazon is very much committed to, even as it makes tweaks. "On the animation pilots, we're trying to look at how we can give studios that we're working with more time, so we've increased the production schedules on those just to allow for exploration and development," says Sorensen. "In previous waves, we were sort of jumping into things, sort of flying an airplane as we were building it."

Having kept fans of the pilot waiting, Santomero says she is anxious to see how the first season is received. "I do tons of formative research because I hate to be surprised, so I know what the kids' reaction is," she says. "I get nervous, but I'm even more excited to really get it out there." ☞



# Solid to the Touch

Platinum Films finds its way to a new technique called roto-morphing for its return to preschool series *Dream Street*. By Tom McLean.



Children's shows – especially those of the preschool variety – often have extremely long runs or are ripe candidates for frequent remakes that appeal to the tastes of successive generations of viewers.

But for Nigel Stone, CEO of U.K.-based Platinum Films, the standard approach most producers take in rebooting such properties leaves a lot on the table.

"It kind of bores me that people have just taken historical shows and just gutted it and did a CGI version of it," says Stone. He cites research that shows children like physicality – they are attracted to items that look like they can be held, touched and played with.

So when it came time to revisit its first series, *Dream Street*, Platinum went looking for more. The original series ran 65 episodes from 1999 to 2002 and was a ground-breaker for its time. With Platinum based outside London at Pinewood Studios, where many of the biggest features in movie history were shot, Stone and his crew injected into the original some of the grandeur of the big screen by using feature film techniques.

The series was produced using a combination of practical effects – mechanical effects, animatronics, real sets – all shot on 35mm film and directed by Brian Johnson, who won visual effects Oscars

for his work on *Alien* and *The Empire Strikes Back*. With curricular guidance from *Sesame Street* veteran Loretta Long, the resulting show was a hit that sold to some 45 territories.

## A Special Look

Having invested heavily in making *Dream Street* unique the first time around, Stone says he wanted something equally special for a new take on the show.

"I wanted to shoot new plates and do live-action skies and backgrounds; there's CGI and 2D and 3D composited-in effects, but I wanted my physical models breathing. I wanted to make them breathe."

The final process they arrived at is called roto-morphing, where characters are roto-scoped out of the live-action footage and enhanced with CG. Then they're combined with live-action plates and painted backgrounds through compositing.

The result evokes stop-motion, but without the staccato movement that even the best stop-motion films have. It also adds character subtlety and is overall very smooth looking, giving Stone the look he wanted.

"Everyone came up with the same thing: Just do a CGI version. There's got to be more than this."

– Nigel Stone, CEO, Platinum Films.



Enquiring with various studios about what could be done, Stone says finding a partner was not easy. "Everyone came up with the same thing: Just do a CGI version," he says. "There's got to be more than this."

Platinum is aiming to make a big splash with *Dream Street* at MIP Junior.

"It's been a lot of money and effort to do the process, but I think it's original," says Stone. "And I think what kids are looking for now is authenticity." ☐

## Good Enough to Eat

"Someone once described it as it has a fondant look about the show; it's edible," says Stone. "I quite like that because it becomes hugely attractive for a young child's eye."

The series again goes for feature-film quality with the sound, tapping Oscar-winning crew from the feature film *Gravity* for the job.

Best known in recent years for its boys' adventure hit *The Matt Hatter Chronicles* – now finishing up its fourth season – Platinum

# The Essential Guide to SIGGRAPH 2015

The can't-miss exhibits, sights and talks for the animation and VFX crowd at this year's Aug. 9-13 confab at the Los Angeles Convention Center.

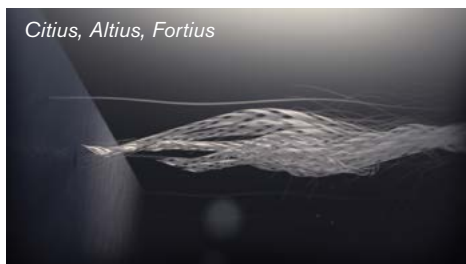
## Computer Animation Festival

The 42<sup>nd</sup> annual Computer Animation Festival will present the best in global CG production, with more than 100 award winners and nominees – selected from more than 500 submissions evaluated by a jury of industry experts – screening at the Los Angeles Convention Center.

Highlights include the winners of awards in 10 categories:

### Best In Show

❖ *Citius, Altius, Fortius* (Germany) – submitted and directed by Felix Deimann. *Citius, Altius, Fortius* explores the interplay of abstract shapes and motions. Original footage of athletes in Olympic competitions was digitized into 3D through motion tracking and rotoscoping. The specific character of each sport is reflected in the visual language.



### Jury's Choice

❖ *Amir & Amira* (France) – submitted by ESMA; directed by Sara Ayoub, Martial Andre, Benjamin Condry, Ariane Dedulle, Cecilia Maturi and Tatiana Tchoumakova. *Amir & Amira* takes on the topic of gender-strict traditional education through the eyes of two wooden puppets at puberty.



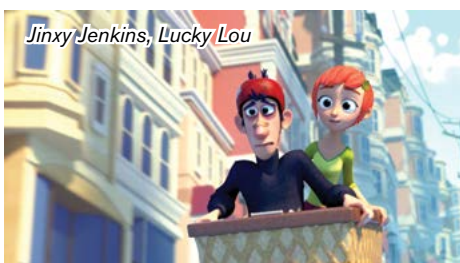
## Best Student Project

❖ *L3.0* (France) – submitted by ISART Digital; directed by Alexis Decelle, Cyril Declercq, Vincent Defour and Pierre Jury. *L3.0* tells the story of Leo, a high-tech “pet” robot that wanders alone in Paris following the mysterious disappearance of nearly all living species. He spends his days trying to entertain himself, but to no avail. Then, one day he meets a new living being.



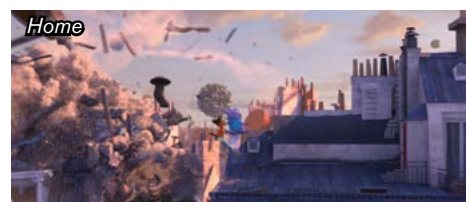
## Best Computer Animated Short

❖ *Jinxy Jenkins, Lucky Lou* (USA) – submitted by Ringling College of Art and Design; directed by Michael Bidingier and Michelle Kwon. The chaotically misfortunate Jenkins and the monotonously lucky Lou run into each other one morning. Together they find a thrilling and fulfilling change of pace as they hurtle down the hills of San Francisco in an ice cream cart.



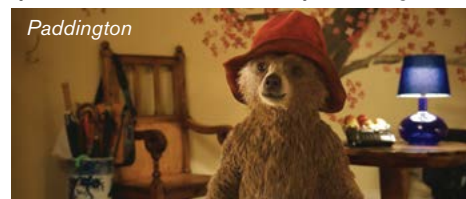
## Best Animated Feature Film

❖ *Home* (USA) – submitted by DreamWorks Animation; directed by Tim Johnson.



## Best Visual Effects For Live-Action Feature Film

❖ *Paddington* (United Kingdom) – submitted by Framestore CFC; directed by Paul King.



## Best Visualization or Simulation

❖ Multi-scale Multi-physics Heart Simulator, UT-Heart (Japan) – submitted by Sciement, Inc.; Directed by Hirofumi Seo.

## Best Music Video

❖ *League of Legends Music: Curse of the Sad Mummy* (South Africa) – submitted and directed by Riot Games.

## Best Game

❖ *Assassin's Creed Unity E3 Cinematic Trailer* (Hungary) – submitted by Digic Pictures Ltd.; directed by István Zorkóczy.

## Best Advertisement

❖ Ikea, “T-Shirts” (United Kingdom) – submitted by MPC; directed by Dougal Wilson.



## Animation Production Sessions

### ❖ Building San Fransokyo: Creating the World of Disney's *Big Hero 6* –

Cinematography and technical supervisors from Walt Disney Animation Studios will explain the creation of the rich and vibrant metropolis of San Fransokyo. [Monday, Aug. 10, 2-3 p.m. West Hall B]

### ❖ Disney-Pixar's *Lava*: Moving

**Mountains** – From designing the main character to integrating new lighting tools, the panelists will explain how *Lava* came to life and how each member was inspired to create this vision. [Tuesday, Aug. 11, 10:45 a.m.-12:15 p.m., South Hall K]

### ❖ Inside the Mind: The Making of

**Disney-Pixar's *Inside Out*** – Pixar Animation Studios will describe the process of designing, building and bringing the world from inside a young girl's mind to life. [Tuesday, Aug. 11 2-3:30 p.m., South Hall K]

❖ **From Post-It to Post Production, The Uncompromising Journey of *The Book of Life*** – Award-winning director Jorge Gutierrez and the art, animation, CG and VFX leads behind the feature present a behind-the-scenes look at this visually inspiring film. [Wednesday, Aug. 12, 10:45 a.m.-12:15 p.m., West Hall B]

❖ **DreamWorks Animation Presents: *Home: Just Another Post-Apocalyptic-Alien-Invasion-Buddy-Road-Movie?*** – Director Tim Johnson and the creative team from the animated feature will discuss their research, the technology and techniques behind this feature film. [Wednesday, Aug. 12, 2-3:30 p.m., West Hall B]

### ❖ **The *Peanuts* Movie: From Comic Strip to Feature Film**

– The Blue Sky Studios team will share insight into their design and animation style for the upcoming feature. [Thursday, Aug. 13, 10:45 a.m.-12:15 p.m., South Hall K]



## Visual-Effects Production Sessions

❖ **Weta Digital Presents: Over 20 Years of Creativity and Innovation** – From the visual effects team behind *The Hobbit* trilogy, Weta Digital will examine the undertaking of ground-breaking CG character development to battle sequences to fire and water effects. [Tuesday, Aug. 11 10:45 a.m.-12:15 p.m., West Hall B]

❖ **Double Negative Presents: The Visual Effects of *Interstellar*** – Double Negative will talk about all aspects of the visual effects work on the film, from the use of traditional, practical techniques to the role theoretical physics played in the design of the visual effects. [Tuesday, Aug. 11 2-3:30 p.m., West Hall B]

❖ **Image Engine Presents: Breathing Life into *Chappie*** – The team behind director Neill Blomkamp's sci-fi comedy will discuss how a small production team brought a digitally created, childlike robot to life. [Wednesday, Aug. 12, 10:45 a.m.-12:15 p.m., South Hall K]

❖ **The Park Is Open: Journey to *Jurassic World* with Industrial Light & Magic** – The ILM team shares the on-set visualization tools used during production, as well as the new visual effects techniques. [Wednesday, Aug. 12 2-3:30 p.m., South Hall K]

❖ **Fix the Future: Industrial Light & Magic and Visual Effects of *Tomorrowland*** – The ILM team will talk about the production challenges and workflow solutions that were developed to deliver this first-ever, 4K release. [Wednesday, Aug. 12, 3:45-5:15 p.m., South Hall K]

❖ **The Making of Marvel's *Ant-Man*** – Creatives from Marvel, Double Negative, Luma Pictures and Method Studios will explore the visual-effects in the making of *Ant-Man*. [Thursday, Aug. 13, 2-3:30 p.m., South Hall K]



❖ **The Making of the Characters of Marvel's *Avengers: Age of Ultron*** – The teams from Marvel, ILM and Lola VFX will discuss everything from animation to visual effects teams and the technologies

and processes. [Thursday, Aug. 13, 3:45-5:15 p.m., South Hall K]

## ACM SIGGRAPH Award Recipients

❖ **Significant New Researcher Award:** Johannes Kopf, Microsoft Research. The Significant New Researcher Award is awarded annually to a researcher who has made a recent significant contribution to the field of computer graphics and is new to the field. The intent is to recognize people who, though early in their careers, have already made a notable contribution.

❖ **Computer Graphics Achievement Award:** Steve Marschner, Cornell University. The Computer Graphics Achievement award is given each year to recognize an individual for an outstanding achievement in computer graphics and interactive techniques

❖ **Steven Anson Coons Award for Outstanding Creative Contributions to Computer Graphics:** Henry Fuchs, University of North Carolina at Chapel Hill. This award, presented during odd-numbered years, recognizes long-term creative impact on the field of computer graphics through a personal commitment over an extended period of time.

❖ **Distinguished Artist Award for Lifetime Achievement in Digital Art:** Lillian Schwartz, independent artist. awarded annually to an artist who has created a substantial and important body of work that significantly advances aesthetic content in the field of digital art

❖ **Outstanding Service Award:** Mike Bailey, Oregon State University. This award, presented for the first time at SIGGRAPH 98, is given annually to recognize outstanding service to ACM SIGGRAPH by a volunteer. It recognizes persons who have given extraordinary service to ACM SIGGRAPH, both in the trenches and in positions of more responsibility or visibility, over a significant period of time ☺

## Exhibit-Floor Shortcuts

3dMD .....#316  
4d View Solutions .....#737  
akeytsu .....#737  
ALp4CE MultiCreation .#240  
Animation Magazine .....#913  
Autodesk .....#317  
Blackmagic Design .....#1019  
Blender Foundation .....#1111  
Chaos Group .....#807  
Dimensional Imaging .....#1007  
Fabric Software .....#214

Formlabs .....#652  
Imagineer Systems .....#312  
Isotropix .....#1001  
Legend 3D .....#1145  
MAXON .....#715  
Massive Software .....#1037  
Mikros Image .....#737  
Motion Analysis Corp. ..#636  
Nolabel .....#251  
PipelineFX .....#801  
Pixar Animation Studios #945

Reallusion .....#236  
Shotgun Software .....#317  
Side Effects Software ...#901  
Smith Micro Software ...#919  
The Foundry .....#309  
Thinkbox Software .....#329  
Unity Technologies .....#544  
Vicon .....#729  
Wacom Technology .....#628  
Xsens Technologies .....#337

# The Growing VR Buzz

These seven companies are leading the way for the rapid development of virtual reality at SIGGRAPH 2015. By Ellen Wolff.

The digital connoisseurs attending SIGGRAPH always expect to see the latest CG and visual-effects featured in traditional entertainment. But this year they'll be getting something new: a glimpse into the emerging medium of virtual reality.

For the first time, SIGGRAPH will host a VR Village, a program of discussions and demonstrations that span the spectrum of this fast-growing field. It will include everything from a 360-degree dome theater down to cardboard viewers that display VR apps running on smartphones.

"We think of it as an eco-system," says Ed Lantz from Vortex Immersion Media, who is co-chairing the effort. "We will have people putting on headsets to sample some VR programming. And we'll also have a 'walkabout' VR arena where four or five people can wear headsets and wander – untethered – in a virtual environment. They'll be able to interact both with the environment and with each other."

This is the kind of futuristic experience that SIGGRAPH has been predicting ever since VR was first discussed seriously at

the conference in 1991. But it's no longer a blue-sky scenario that requires exorbitantly expensive military-grade gear. The rollout over the next several months of consumer grade headsets from Oculus Rift, Sony Morpheus, HTC Vive and Samsung Gear VR means that this year there are actual virtual reality productions in the pipeline.

What visitors to SIGGRAPH's VR Village will experience are working programs that will help launch this new medium. As Lantz observes, "Programming is vital. It is what will determine whether VR goes anywhere."

## The VR Producers

The creative challenges of producing VR experiences can be daunting, since producers must craft a frameless experience in which viewers get to completely control their point of view. While CG games are obviously ideal for this medium, many creatives also are looking beyond that niche, and designing experiences that are more akin to virtual tourism, music, education, medicine and journalism. Here's a sampling of companies that are poised to be part of this year's buzz:

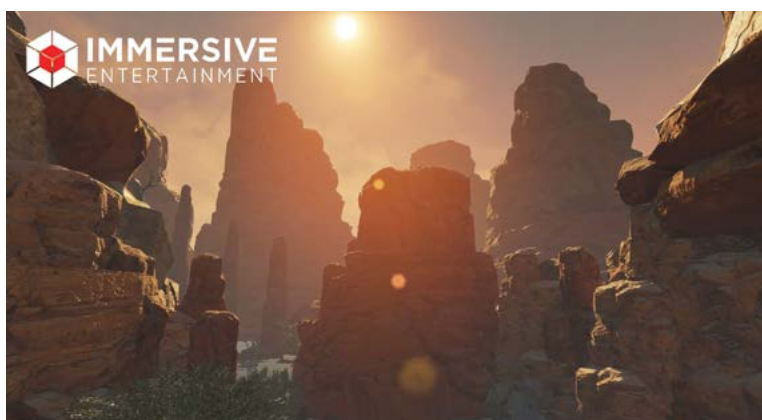
### Immersive Entertainment

Founded in 2013  
Irvine, Calif.

At VR Village, viewers can take a kayak trip down the Grand Canyon and never get wet. That's the vision of Jeroen Van den Bosch, who's leading a VR team into a territory beyond games. The goal is to immerse the virtual traveler in a lifelike world where realistic CG is rendered in real time. "In our *Grand Canyon Experience*, you have a nice field of view from the river," says Van den Bosch. "Because nothing is pre-recorded, every time the experience will be different."

Immersive Entertainment expects to release *The Grand Canyon Experience* this fall, and Van den Bosch is already anticipating a future version that allows people to see their virtual hands interacting with procedurally generated elements in the environment. "If you throw bread crumbs in the water, the fish will come to you, just like in the real world. That's what we're working on now, and it's where the true virtual reality experience lies."

His team uses Maya and the Unreal game engine, and Van den Bosch says the artists at Immersive Entertainment come from various game and visual-effects companies. "It's surprisingly easy to find talent. If you're a veteran animator, you can only create so many jumping soldiers before it gets boring. We have artists with the craftsmanship to make beautiful environments, and create worlds that people can explore. In virtual reality, the environment is center stage."





## Jaunt Studios

Founded in 2015

Palo Alto, Calif., and Los Angeles

While computer-generated graphics are central to many VR products, it's not the only path. "We're in the live-action end of VR," says Miles Perkins, VP of Jaunt Studios and one of the former Lucasfilm veterans launching this new venture. Using the term "cinematic VR," he says: "We're positioned right now to focus on projects where you start with a live-action plate."

While it's hardly trivial to stitch together video content to make 360-degree experiences, the technologists behind Jaunt have developed a camera called Neo that captures full stereo video. The resulting footage can then be processed using standard tools like Avid and Final Cut Pro. "This system was built from the ground up with VR in mind," Perkins says. "It's not unlike what we did in the past at ILM, where we had to build technology in order to create content."

Among the speakers at SIGGRAPH's VR Village will be Jaunt Studios' president Cliff Plumer, a veteran of both ILM and Digital Domain. He'll speak to Jaunt's plans for creating cinematic VR with a variety of talents in the entertainment industry. Early examples include a live concert by Paul McCartney, which can be sampled on smartphones through an app on the Jaunt VR website. Also in the pipeline is *Earth Encounter* by popular YouTube creator Brandon Laatsch. These are just the beginning of what Jaunt hopes will be a network of collaborations, and the company's advisory board already includes director Mark Romanek and actor-musician Jared Leto. "A way of thinking about Jaunt," says Perkins, "is like a 'VR Genius Bar' for creatives."



## Emblematic Group

Founded in 2007

Los Angeles

VR Village visitors who see the work of Emblematic Group are unlikely to have ever encountered anything else like it. That's because company founder and former *Newsweek* correspondent Nonny de la Pena uses VR to put people inside of realistic events like the war in Syria or the shooting of Florida teenager Trayvon Martin.

"It's what we mean by 'immersive journalism.' I'm trying to imbue a broader sense of difficult issues, and that's driven me to tell important stories in virtual environments," she says. "When I realized that by putting you on-scene, you could have a more visceral reaction, it motivated me to explore how to use VR."

De la Pena, whose experience also includes making documentaries like *Unconstitutional*, uses a mix of documentary audio, video and CG to evoke virtual, real-world scenarios. Her approach has been so influential in

this nascent field that she's been dubbed "the godmother of VR." Even the acclaimed Oculus Rift creator Palmer Luckey once worked as her intern.

Recently, Emblematic attracted venture capital funding from Rothenberg Ventures, and the company's journalistic projects are made possible by doing more conventional VR pieces like "Grand Prix" for corporate clients. And de la Pena points to some key factors to support her belief that immersive journalism can be a viable business going forward. "The audiences of the future will get used to having virtual selves moving around in virtual space," she says. "They won't be locked to TV or computer screens. There will be an estimated 25 million VR headsets by 2019. So this is a really good time to begin preparing for that."

## Create VR

Founded in 2015

A division of Create Advertising

Los Angeles

Short-form virtual-reality experiences promise to be ideal introductions to VR for the general public, and that has sparked the involvement of experts in advertising and marketing. The award-winning agency Create Advertising has even launched a division called Create VR, dedicated to producing branded VR experiences for its clients. The division is now unveiling its inaugural project, which was designed to promote director Robert Zemeckis' upcoming Sony Pictures release, *The Walk*.

Titled *Can You Walk The Walk?* this VR experience gives viewers a virtual white-knuckle POV of the high-wire artist who in 1974 walked between the World Trade Center towers, 1,300 feet in the air. Create VR developed it on the Sony Morpheus VR platform, and they crafted the CG elements by down-rezing digital assets from the movie itself and bringing those assets into the Unreal game engine.

As Create VR Television and Gaming VP Jonathan Gitlin says: "In movies, you only need to build out what's going to be seen onscreen, but in VR everything needs to be built, so we were able to fill those gaps."

The reaction among those who've seen the piece has been visceral, notes Create Advertising founder and president David Stern. "When people put on the goggles, we've seen very physical reactions. People are amazed by the amount of detail. When audiences can sample an experience like this, it hopefully will hook them into seeing the movie. It is so powerful that studios and filmmakers are opening their eyes to the power of VR."

## The Technologists

The exhibition floor at SIGGRAPH is a perennial showcase for the hardware and software systems that have propelled stunning advances in digital imagery for movies, television, games and scientific visualization. This year, those who walk the floor with an eye towards virtual-reality applications will see how those enabling image technologies are being developed for stereoscopic, real-time uses like VR.

### Motion Analysis

**Founded in 1982**

**Headquartered in Santa Rosa, Calif.**

**Sites worldwide include Beijing and London**

Populating VR worlds with characters that behave believably often requires precise and practical methods of motion capture. The high level of motion capture that's been achieved for movies and games is something we can expect to see in virtual reality going forward. The optical motion-capture systems offered by Motion Analysis appear well positioned to tackle this emerging marketplace.

At SIGGRAPH, Motion Analysis will be promoting its multiperson, large area motion-capture solution. The system enables the capture of realistic, full body motion of several performers simultaneously, as well as the props they are using.

The system allows for customized capture volumes, specialized marker sets, real time display and immediate data playback. The company's customizable skeletal software also means that users can get clean motion-capture data for CG animals and creatures as well.

The mobile technology offered by Motion Analysis has enabled the company to assist clients at sites around the world. Over the years, it has been used for films like *Avatar*, television series like *Falling Skies* and sports games from NASCAR to the NBA.

At this year's SIGGRAPH, Motion Analysis will be demonstrating a new feature called Continuous Calibration in the company's Cortex software, which is a single program that handles all phases of motion capture – from initial setup and calibration to tracking and post processing. Continuous Calibration allows for uninterrupted data collection, even if a camera is bumped or moved. It's the kind of integrated application that Motion Analysis expects will greatly improve productivity for a wide range of clients.

### TechViz

**Founded in 2004**

**Paris**

TechViz has developed an international reputation as developer of advanced visualization solutions for 3D applications, with a client list that includes Walt Disney Imagineering. The company's TechViz XL allows users to go beyond the desktop workstation and display virtual prototypes in real time, directly from a 3D application into a virtual environment without data conversion. The systems work with Maya or 3ds Max as well as scores of CAD applications.

What will be of special interest to VR aficionados this year is TechViz's software editor that enables users to display old applications that have not been adapted to VR systems. Given that this is such a transitional time, when digital assets are moving into the virtual reality realm, TechViz envisions great appeal for this tool.

As chief technology officer Alexis Vartanian explains: "Our solution is really unique in this area, as one big requirement of VR has always been that users need to write special applications or heavily modify them."

At last year's SIGGRAPH, TechViz presented an immersive demo in a three-sided CAVE display in its booth on the exhibition floor. This year, the company is upping the ante, showing a very large VR projection wall with a 4K projector from Christie. The demo will also include some haptic interaction via Haption Virtuouse touch feedback technology, showing that TechViz is thinking big about the coming age of immersive VR.

### Chaos Group

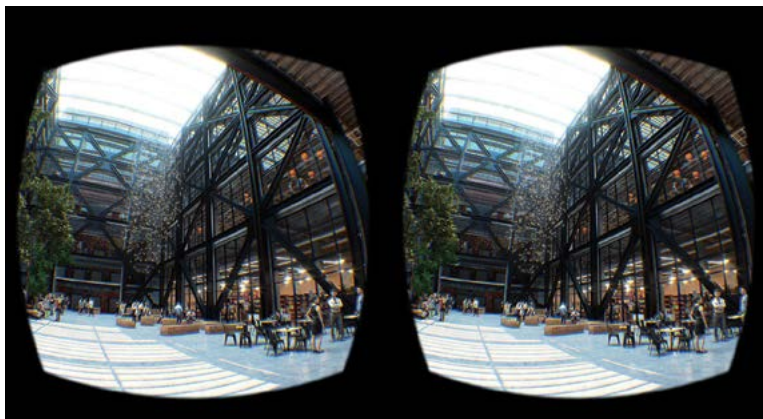
**Founded in 1997**

**Headquartered in Sofia, Bulgaria, with offices across Europe, the U.S., Japan and Korea**

The ability to simulate convincing virtual scenes relies on a content creator's ability to render CG with a high level of photorealistic detail, and that's the specialty of Chaos Group. The company is the developer of V-Ray, a physically based rendering and simulation software system that has proven widely popular in the CG community. It explains why Chaos Group has grown from a team of two to a team of more than 100 people worldwide.

At this year's SIGGRAPH, the company will showcase environments created by several clients, including VR developer Nurulize, digital set maker Blackhaus and Legend 3D, creator of stereoscopic visual effects. Legend 3D will present images from director Guillermo del Toro's *Crimson Peak*, which will be released this fall by Universal. Chaos Group will also be hosting a VR Bar, where clients can talk about their newest work.

A key focal point of the company's latest version of V-Ray is the inclusion of two new VR Camera types. This enables users to render stereo cube maps and spherical stereo images for VR headsets such as Oculus Rift and Samsung Gear VR. "Now V-Ray artists can easily view their designs in VR," Chaos Group co-founder and V-Ray lead developer Vladimir Koylazov recently noted, "VR is one of the most exciting things to happen to CG in the last decade." ☞





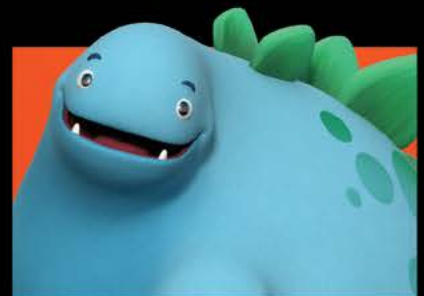
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# Heart of the Matter

**Expo project *Alex & Sylvia* exemplifies BRC Imagination Arts' heartfelt approach to creating unique exhibits and experiences for clients the world over. By Tom McLean.**

**A**lex & Sylvia appears to be an ordinary animated short film: A dialog-less tale of a young woman scientist who falls in love with a charming man who helps her learn to bake bread in her grandmother's bakery. But the only way to see it is by visiting the European Union pavilion at Expo Milano 2015, the world's fair running through October in Italy.

The nine-minute film is the work of BRC Imagination Arts, which describes itself as an "experience design agency" and created it on behalf of the European Union to convey a message of using science, agriculture and collaboration to better the world.

Founded in 1981 by two-time Oscar nominee Bob Rogers, the Burbank-based company set out to create compelling and entertaining content for corporate clients. The EU exhibit in Milan is just one example of the work BRC has done for its clients, which over the past 34 years have included Coca-Cola, The Ford Motor Co., The Abraham Lincoln Presidential Library & Museum, the Milwaukee Brewers and the Kennedy Space Center.

Rogers, who produced *Alex & Sylvia* with BRC's Philipp Edelmann, says about half of the company's projects involve animation.

"We create environments and visitor experiences in places that immerse people," he says. "You can do anything in animation and you can take people places with animation and collapse time and other things and create visual metaphors or use other storytelling techniques with animation

that would be extremely difficult or impossible with live action."

For *Alex & Sylvia*, the requirements of the project made animation an ideal choice, says Christian Lachel, BRC creative director and director of the movie.

"We could have done a lot of things, but we really wanted to create a metaphor for Europe by bringing people together, in this case, agriculture and science," says Lachel. "Sometimes animation is the absolutely perfect way to do that and especially when you're dealing with a large, broad



international audience, it seems to be something that really stands out."

The project came about because of BRC's connections in Europe, where it's been established for about 18 years, and its reputation of having created top-notch exhibits for many previous world's fairs, Lachel says.

## A New Approach

"The European Union in past world expos has typically done a scientific approach," Lachel says. A more emotional approach appealed to the EU, which was seeking a different strategy to bolster

a brand that has struggled in recent years.

Developing an idea that can be approved by as broad an organization as the EU is a daunting task.

"The real challenge comes from having an extremely abstract idea we have to get across, very often for a large organization that is itself to the general public an abstraction," Rogers says. "That's another reason why animation is frequently the ideal vehicle, because animation has that ability to simplify and soften very large abstract ideas and find the common ground between people."

Unlike working on a feature or series, this type of project needs to condense its message and convey it as simply and as understandable as possible to an extremely broad audience in a very short time. For example, *Alex & Sylvia* will be seen by anywhere from 1 million to 2 million people from all over the world in its six-month run.

With the EU being so broad, diverse and large an organization, finding an idea that meets all its various points of view is a big challenge — one BRC solves by borrowing a technique called a charrette that Walt Disney used when he was planning Disneyland.

"He would go and talk to the architects, and the architects would have one idea for the park; and then you go talk to the planners, and they'd have a different idea for the park; and then he'd talk to the artists, and they'd



have a different idea," says Lachel. "He said: 'I'm tired of that. I'm going to get everybody in a room and we're going to make some decisions and set some objectives and we're going to walk away with a plan.'"

While the process is not always easy, BRC has evolved that idea into a solution that has let it find common ground for a creative approach on projects for some of the largest corporations in the world, Lachel says. For *Alex & Sylvia*, BRC worked with about 40 different agencies and developmental teams.

"We focused on that idea of togetherness," says Lachel. "When we work together, we find that we are more alike than we are different and that if we do things as a unit or as a team or working hand in hand, in this case agriculture and science, that we can find ways to make the world a better place and that's really where the theme in the film started to evolve."

### Idea to Animation

With an approach in hand, BRC entered a development and preproduction process that, while intense, is not too different from that used by most animation studios, starting with story treatments, artwork, storyboards and animatics.

"The one key difference is we're also thinking in terms of space," Lachel says. "So we have to think about how the story unfolds across a sequence of places and spaces that helps tell that story, as well as the idea of time, which is how we pace each one of those pieces as you move through a physical experience."

Another way in which the process differs is that BRC has control of and can customize all the technical specifications from the file server on which the movie is stored, which projector and how many and what type of screens it's shown on to the seats the audience will sit in and the ability to add special effects.

"We have in many ways more tools and the ability to do work with greater technical precision than just about anybody else," Rogers says. "That's a rare set of privileges that sometimes adds up to not only at first a bewildering

set of choices but, ultimately for the audience, a much better experience when it's done right."

All of the creative direction is done in-house, starting with detailed storyboards, previz and animatics, says Edelmann.

"We have a really strong story unit here at BRC. We're including our editors, who are a part of our process, and really honing the story reel and the animatic and when it's finally ready to go, handing it off to the animation team," says Lachel.

For this project, Edelmann says they were careful to design a look for the project that was clearly European but not specific to any one nation. "I'm from Europe myself, and I understand the sensibility that you don't want to have a film that's very clearly set in Italy or very clearly set in Spain."

BRC worked with Prana Studios in India on the animation, and this marked the seventh collaboration between the two companies. Both are now so used to working with the other, that all communication was done over the Internet.

"We used a sort of note-taking system that we installed here at BRC, which lets us download the animation pieces and the scenes on our system, and then take notes, draw on them and send it right back," says Edelmann.

Animation took about 5½ months to complete, and BRC's in-house editing team assembled the final version.

"Once we get the animation back we sort of make the film all over again in the editing room," says Rogers. "That's the only way to get the level of quality that a temporary audience now demands if you want them to listen to you."

### Unique Global Uses

Animation has factored significantly in other projects BRC has recently completed, most notably for The Story Garden at the AmorePacific Beauty Campus in Gyeonggi-do, South Korea, and for The Ford Rouge Factory Tour in Dearborn, Mich.

The AmorePacific site used animation to tell how AmorePacific evolved from a family



Bob Rogers



Christian Lachel



Philipp Edelmann

business to one of Asia's leading cosmetics companies. The Ford tour featured animation mapped and projected onto a blank 3D truck shape to demonstrate the process of designing and building the vehicle.

But Rogers says it is the heart in each of BRC's projects that makes its work stand out. "If it wasn't for the EU logo at the end, you wouldn't know who's presenting it," he says of *Alex & Sylvia*. "In the context of the EU pavilion, you get the idea, but the work itself is very open hearted, very much working to the heart of the audience. It doesn't seem like a commercial piece at all. That's one of the things we're known for: Trying to do things that would be totally acceptable just as straight entertainment, yet it's accomplishing the goal of our client." ☺



BRC Imagination Arts worked with Prana Studios on the animation for *Alex & Sylvia*, which was created to be shown at the EU pavilion at the 2015 Expo Milano in Italy.

# Spotlight Stories' Next Wave

The Google project responsible for *A Windy Day* and *Duet* pushes onward with new immersive projects from three top animation talents. By Tom McLean.

Founded in 2013 to use technology in mobile phones to tell stories that make people feel, the Google Spotlight Stories experiment has so far yielded such impressively original works as Jan Pinkava's *A Windy Day* and Glen Keane's Oscar-nominated *Duet*. (The Google Spotlight Stories app recently became available for iOS devices.)

Now, the project is moving into its next phase, with three upcoming spotlight stories from animators Patrick Osborne, Felix Massie and Shannon Tindle.

## Patrick Osborne's *Pearl*

Winner of last year's Best Animated Short Film Oscar for *Feast*, Osborne says he met the Google team at Annecy and was asked to think about doing something in the vein of *Duet*, which he got to see working a few months later.

His first thought came from people saying they turn around and suddenly their little child is 5 years old or 12 years old.



"Maybe I could advance time by having the audience turn?" he says. "There's something cool about if you're looking this way it's one time, and if you're looking over there it's the future, and so on."

His original idea was to set a story entirely inside a 1983 Chevrolet Citation, following the various owners of the car throughout its lifespan.

"It's evolved a little bit into being a story about a single father and daughter who live in their car as they drive around the country and he's trying to chase his dream of being a singer-songwriter musician," Osborne says of the project, titled *Pearl*. "You're in the center of the car the whole time, so there is this world around you – things can happen in the back seat, in the front seat, or outside, depending on where you look."

*Pearl* is set to an original song, which presented some interesting storytelling choices for Osborne.

"Music doesn't have the same time flexibility as other things do; the beat has to work," he says. "I had to structure the story like a pop song to get it to work, you needed like a chorus and a verse."

The transitions between parts of the song give Osborne a chance to let viewers look around a bit. The project began in April and has been storyboarded with the main work having just begun.

"You have to kind of give up the idea that the audience is going to see everything and make sure the moment they are immersed in is right in that story ... that the emotional story is there, the feeling is there, and it's tricky," he says.

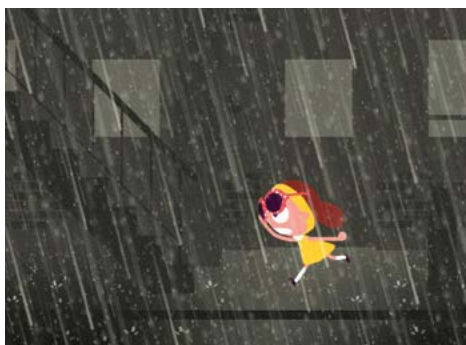
## Felix Massie's *Rain or Shine*

English animator Massie, whose credits include the multi-award winning short *In the Air Is Christopher Gray*, is working on a project called *Rain or Shine*.

"It's about a girl who's followed around by a rain cloud, so it's kind of a classic idea, I suppose," he says. "She has this pair of sunglasses she wants to wear and every time she puts them on, it rains. When she moves, if you follow her, you drag the rain with you, so there's like this strip of rain following wherever you look until she takes the glasses off."

Inspired by the illustration work of Robin Davey, Massie says the feel of the viewer looking through the phone into the rain is a very cool effect. "It's not just rain in the same world, it's like a portal, so it's really grim," he says.

The short is set in a London-esque city square and the viewer follows the girl and her rain around. "She goes around and ruins people's days, basically, just by being there, and eventually her spirit gets a little bit crushed," he says. "And then at the end she learns how to use it in a positive way."



## Shannon Tindle's *On Ice*

A veteran animator and character designer, Tindle says that after seeing some of the early Google Spotlight Stories, he wanted to do something that was very much a cartoon.

"I wanted to pick something that was going to work in 360, so I said, what if we had a big, over-the-top Ice Capades show, and we put the camera down on the ice, so you're kind of immersed in it," he says.

Then it gets cartoony, with a seen-better-days competitive figure skater performing in the show when a bear skates out on the ice.

The idea was one Tindle had worked on as a



student at CalArts that he says he never finished. But the idea is basically that this hard-working skater's spotlight is stolen by something ridiculous – a common occurrence in the Internet age.

"If you had videos of really amazing ice skaters, those guys might get 35,000 hits on YouTube, but if you had a really low-grade video of a bear on ice, it'd get 35 million hits," he says. "People want to watch the train wreck rather than a smooth ride."

Lou Romano worked with Tindle on the project, titled *On Ice*, as production designer.

"This is unique in that there really is one set," Romano says. "Having it be an ice rink means we can change things when you aren't looking, like bring in certain set pieces and then do things with lighting to create scene transitions."

Pinkava, creative director of the project, says the new projects continue to push back the vines of the undiscovered territory that is immersive storytelling. "It feels like there's a real place there and we'll see like we'll find a stable place to stand." ☞



# Toon Goggles Peeps the Future of Kids' Media

The leading dedicated streaming platform for tykes keeps making innovative strides.

Toon Goggles, the children's online video portal offering thousands of kid-safe cartoons, is proving its dedication to staying on the cutting edge of kids' entertainment. The platform has evolved beyond just another video site, with a flurry of new deals and initiatives recently announced.

For example, Toon Goggles is one of the first companies (along with Netflix and YouTube) to offer 4K Ultra High Definition content, with over 400 episodes of hit shows like *Bernard* and *Trust Me, I'm a Genie* currently available to stream. The company also worked with its tech partners to develop and become a pioneer in globally streaming 4K content over LTE cellular networks, breaking the wifi barrier.

To encourage creativity, the app has incorporated the new TG Shortiez video recorder, which allows kids to make videos and apply tons of creative filters like Toon, Stretch (a cool funhouse mirror effect) and Polka Dot. A built-in parent approval process alerts parents to new videos via e-mail before they can be published.

Parents can be further involved in their children's entertainment experience on Toon Goggles thanks to an Apple Watch app. Available now through iTunes, parents and guardians can use their Apple Watch to browse, monitor



and control content thanks to a Play/Pause feature, set parental controls and use the Jump! feature to discover new shows. The app supports Glances as well as Notifications.

Toon Goggles has also expanded viewing options for users. In addition to iOS and Android devices, Roku and Smart TVs from Sony, Sharp and Samsung, the app now comes pre-loaded on VOXX Electronic's Audiovox and Advent branded Android-based custom headrest systems to help save

everyone's sanity during family road trips. For less visual stimulation, kids can now tune into a separate music service: TG Radio, offering a variety of tyke-friendly tracks for \$2.99 a month.

And one of the most exciting steps for the company's development is the creation of its first original property: A CG-animated series for kids ages 6-12 titled *Eddie is a Yeti*. The cryptozoological concept was recently picked up by Lawless Entertainment, who will serve as North American representatives for licensing, merchandising and publishing playing fields.

*Eddie is a Yeti* is an animated, dialog-free short form series that follows the adventures of the titular yeti and his best friend, Polly. The show will be produced by Mondo TV, which will handle overseas distribution and merchandising.

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# The Essential Guide to D23 2015

Legends, previews, exhibits and the shirts off John Lasseter's back all await enthusiastic fans at the fourth edition of the Disney confab.

If you live, breathe and dream all things Disney, odds are you're already focused on heading to the Anaheim Convention Center Aug. 14-16 for the D23 Expo.

The studio's biennial event for fans will be the place to get all the inside details on the studio's upcoming projects, from Pixar's *The Good Dinosaur* and a little movie called *Star Wars: The Force Awakens* and far into the moviegoing future.

Since the event has grown – this year, a 7,500-seat auditorium called Hall D will host the most in-demand events – it's a good idea to plan ahead, so here's our rundown of the best bets for the animation connoisseur.

## Disney Legends

Eight new Disney Legends will be honored at an awards ceremony set for Friday, Aug. 14, at 10 a.m. in Hall D hosted by chairman and CEO Bob Iger.

Andreas Deja is considered one of the studio's greatest animators, having worked on Gaston for *Beauty and the Beast*, Jafar for *Aladdin* and Scar for *The Lion King*, among others.



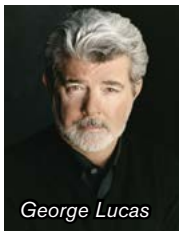
Eyvind Earle is held in the highest regard for his work on dozens of Disney animated feature, but most notably for his influential visual styling and backgrounds for *Sleeping Beauty*.

George Lucas is the creator of the *Star Wars* and *Indiana Jones* movie series as well as the founder of the pioneering visual-effects studio ILM.

Danny Elfman is a prolific composer, whose Disney credits include *The Nightmare Before Christmas*, *Alice in Wonderland* and *Avengers: Age of Ultron*.

Carson Van Osten, who oversaw creative content for movie tie-in advertising, Disney publications and created licensing style guides for Disney Consumer Products.

Julie Reihm Casaletto, the first Disneyland Ambassador.



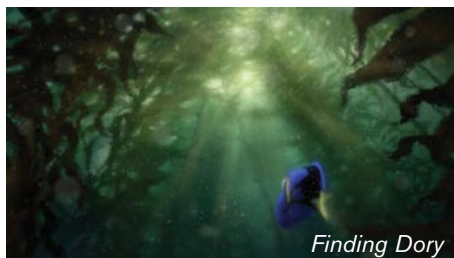
Susan Lucci, actress known for playing Erica Kane for 41 years on ABC's *All My Children*.

George Bodenheimer, former executive chairman of ESPN.

## Can't-Miss Panels

### Friday

**In Conversation with the Filmmakers and the Emotions Behind *Inside Out***: Get the inside story on the making of Pixar's latest summer release from director Pete Docter and producer Jonas Rivera. [11:30 a.m. – Stage 28]



**Every Story Is a Journey: The Upcoming Films of Walt Disney and Pixar Animation Studios**: John Lasseter presents a look at the studios' upcoming projects, with filmmakers showing all-new footage from Pixar's *The Good Dinosaur* and *Finding Dory* and Disney's *Zootopia* and *Moana*. [3 p.m. – Hall D23]



### Saturday

**Live-Action Movie Preview: Disney, Marvel and Lucasfilm**: Special guests will present new footage from and new info on such upcoming features as *Alice Through the Looking Glass*, *The Jungle Book* and films from Marvel and Lucasfilm. [11 a.m. – Hall D23]

**Welcome to *Zootopia*!**: Join directors Byron Howard and Rich Moore, producer Clark Spencer and artists from the production team as they introduce the upcoming feature film and its characters. [1:30 p.m. – Stage 28]

**Pixar Secrets Revealed! Hear the Stories They Didn't Want You to Know!**: Pixar's Mary Coleman welcomes Darla K. Anderson, Mark Andrews, Ronnie

del Carmen and Dan Scanlon as they talk about crafting a narrative and share story ideas that didn't make the final cut. [3 p.m. – Stage 28]

***Toy Story: 20 Years Later, the Original Crew Looks Back***: Celebrate the 20th anniversary of *Toy Story* with filmmakers John Lasseter, Pete Docter, Andrew Stanton, Lee Unkrich, Galyn Susman, Ralph Eggleston, Sharon Calahan, Eben Ostby, Bob Pauley and Bill Reeves. [4:30 p.m. – Stage 23]

***Aladdin – The Making of a Classic***: A discussion with directors John Musker and Ron Clements, animators Eric Goldberg and Mark Henn, as well as Jasmine herself, Linda Larkin, and the two actors who gave life to the character Aladdin: Scott Weinger and Brad Kane. [6 p.m. – Stage 28]

### Sunday

**The Shorts of Walt Disney Animation Studios: From *Paperman* to *Prep & Landing*, *Feast* to *Frozen Fever***: Join the filmmakers behind these shorts and so many others, including *Get a Horse!*, *John Henry*, *Lorenzo* and *The Ballad of Nessie* for a conversation about the form. [11:30 a.m. – Stage 28]

***Frozen* FANdemonium: A Musical Celebration!**: Join host Chris Montan, president, Walt Disney Music, and the Oscar-winning songwriting team of Kristen Anderson-Lopez and Robert Lopez as they take you on a once-in-a-lifetime musical journey through the world of *Frozen*. [3 p.m. – Hall D23]

**The Tunes Behind the Toons: Screening and Q&A**: A special screening and Q&A panel for Dave Bossert's short-form documentary that celebrates the power of music in animation. [6 p.m., Stage 28]

## On the Floor

**Animation – Show Floor Exhibition**: Live demonstrations, presentations and autograph signings with top filmmakers, free giveaways and interactive displays.

**Say Aloha to John Lasseter's Film-Themed Hawaiian Shirts**: A collection of Lasseter's famous movie-themed shirts commissioned for each film he's made.

**An Animator's Gallery: Eric Goldberg**: The exhibition features a collection of more than 100 of Goldberg's caricatured creations of Disney characters from the newly released book *An Animator's Gallery: Eric Goldberg Draws the Disney Characters*.





# SHADOWS



[www.shadows-film.com](http://www.shadows-film.com)

## Fund Your Independent Project Now (Part Two of Two)

*See Animag's July 2015 issue for Part One, laying out top options on where to find funding once you have a project proposal to present.*

**Banks** – I recommend making banks the last consideration after all other options have been exhausted. It may sound tempting to take out a second mortgage on your home, but guess what happens if your project falls through? Yep, you lose your house. You can also take out personal loans, secured loans and a host of other options from your local financial institution, but unless you have exemplary credit and a pile of cash sitting around in multiple accounts (if you did, you wouldn't really need to be seeking that much funding), you will end up paying a painfully high interest rate on an amount that was much less than you hoped you could qualify for.

**Advanced sales** – Create an amazing trailer, post it all over the world and create a purchase site where people can buy a DVD or download of your movie at a discounted rate in advance. Pack this site with the proven track record of your team's ability to deliver on time and within budget. Similar in concept to crowd funding, be sure to offer an iron-clad refund if the project does

not happen for some reason. It's safest to implement this strategy after you have generated enough funding to at least get your project started so you can avoid the need to refund all those advanced purchases should it not get off the ground after all. If this happens, not only will you need to refund all advanced sales, but you will end up eating the transaction fees and credit card charges of all purchases as well as other expenses of the merchant site.

**Get rid of your junk** – Personal sale and auction websites, garage sales, classified

newspaper ads, special interest magazines – all of these are great places to liquidate your unused, unwanted or valuable personal items that have either been collecting dust for the last several years or are less important than seeing your project come to life. You may be surprised at how much money you can generate while simultaneously cleaning out your house and storage units. Win/win.

**Current place of employment** – Even if your workplace has nothing to do with your dream project or its respective industry, chances are the owners like to make money just as

tiered approach. When romancing potential investors, treat each one based on the approach you are using to find them. For example, some people will only be interested in going to your crowd funding site and have no interest in meeting you in person. Some will only want to see your business plan and have no interest whatsoever in checking out your social media page. Some people may be extremely wealthy and simply want to do something with their money other than pay it all to Uncle Sam.

The point is, *you* are asking *them* for their

money and their trust, so you must be as sincere and as accommodating as possible. Bring everything to them. Treat them as if they literally have the power to make your dream come true – because they do.

Sell them on the glitz and glamour of being part of something creative. If you can do that, then their decision won't be made based strictly on ROI percentages; it will be about being part of something cool, creative and excit-

ing. Which is probably exactly why you're an independent in the first place.



much as the next business. If you happen to work for a forward-thinking boss or an insightful board of directors that like the idea of diversifying, a brief mention of your project to one of the owners may be enough to plant a seed which could be harvested in the future. This is exactly how I secured almost \$500,000 to write, direct and produce my own 30-minute cartoon.

Chances are, funding for your project will come from a combination of any or all of these areas, which is why you need to have a multi-

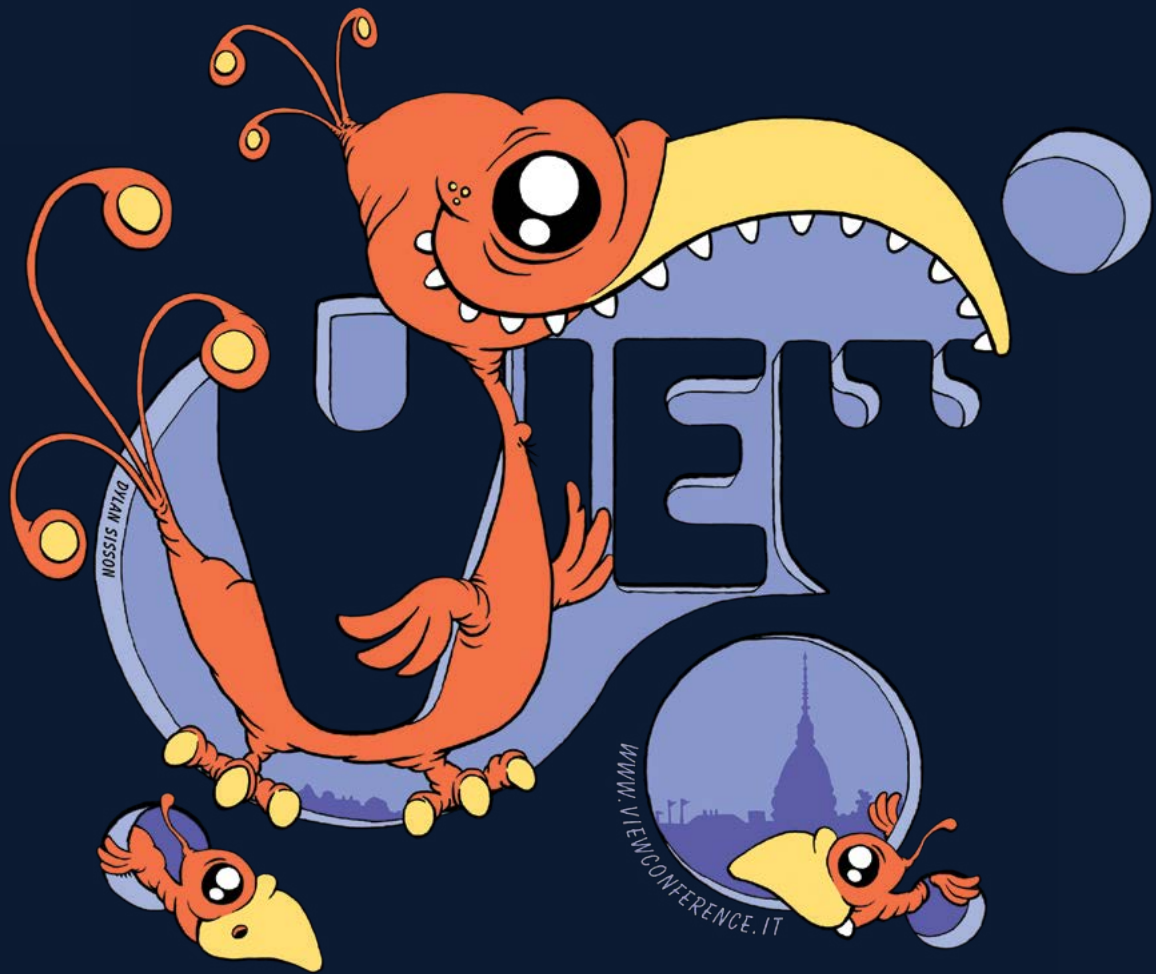
**Martin Grebing is an award-winning animation director, producer, small business consultant and trainer. He is President of Funnybone Animation and can be reached via [funnybone-animation.com](http://funnybone-animation.com).**





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# Turning Back Time

MPC recreates the look and the performance Arnold Schwarzenegger gave in the 1984 original for *Terminator Genisys*.

By Bill Desowitz.

MPC of Montreal was tasked with the biggest VFX challenge in *Terminator Genisys*: recreating Arnold Schwarzenegger's memorable T-800 cyborg from the original 1984 *Terminator* feature for a fight with the older version of himself known as the Guardian in an alternate timeline. But, as we know, making a CG version of a younger actor can take you into the Uncanny Valley (such as Jeff Bridges in *Tron: Legacy*).

"When I first heard about the project a year and a half ago, quite frankly, I thought it was madness to take this on," says Sheldon Stopsack, MPC's visual-effects supervisor. "And the more iconic a character is, the more difficult the challenge becomes. Nevertheless, when you think something is crazy, there is this fascination as well. We knew we had to step up the game in the same classical fashion as any other digital character that we've done in the past. We also had to reconfigure the whole process in our pipeline."

The challenges didn't stop there. "From a build perspective, how do we model it? Normally, we'd set up a texture and photograph shot as a good starting point," says Stopsack. "But the Arnold Schwarzenegger of 1984 doesn't exist anymore, so we didn't have that luxury."

So the first thing they did was collect vintage images and footage, including *Pumping Iron*. This gave them a reference point for his look back then. Interestingly enough, this became the theme pretty much throughout the entire movie: the constant evaluation in comparing against the footage that they had assembled and created a library from. "It was something we utilized from the very beginning in setting up the model and then always within in the context of the shot," says Stopsack.

MPC also checked out the work of other visual-effects facilities and research groups – including Paul Debevec's Light Stages at his Institute of Creative Technologies at USC – and conducted its own research to push it to another level.

"An early decision that we made during the build-up process was evaluating the implementation of the full path-tracing methodology that came with the RIS rendering in RenderMan 19," Stopsack says. "This was interesting because it leaves you with a more physical, plausible full ray-traced approach, which is always desirable if the goal is to do something physically accurate. But on the back of that, *Terminator* was one of the first shows involved in that implementation and deployment of that technology, which meant for us that we had input in what the requirements were in terms of the shader light. On the back of RenderMan 19 and RIS, they introduced a new skin-shading model, which went hand in hand with the texturing work that we had to do, which was oriented more toward a multilayered scattering approach. Early tests of the skin model that we did shifted with the coming of RenderMan 19, so the subsurface scattering was a lot more naturalistic and true to a human being. This approach also provided much richer features





Brett Azar, left, poses as the body double for the 1984 version of Arnold Schwarzenegger for *Terminator Genisys*, with the digital results at right.

and fine micro-level detail of the skin pores."

### Interconnected Techniques

Shading, texturing and rigging were interconnected. Therefore, a lot of work that happened on the back of the rig development fed into the skin shading and dynamic muscular displacement, so data from the rig drove the shader. For instance, blood flow had an impact on subsurface skin appearance,

MPC took an inside out approach to rigging, which is more common in the industry today. "We needed to create the underlying skeletal structure, making sure the body proportions are anatomically accurate to what Arnold Schwarzenegger was and still is to some extent, and have the muscular system built out of what Arnold looked like in '84," says Stopsack. "But your digital model still

ends up being an abstraction. So to ensure a 1:1 accuracy where we recreated shots from the original movie, there was also a level of correction that had to go on top of every single shot."

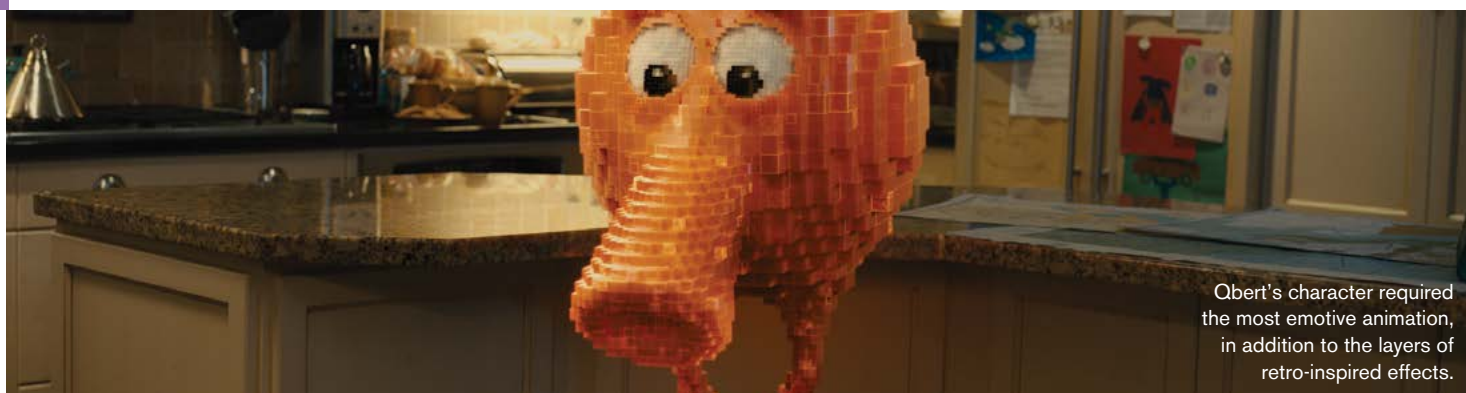
The recreation of an iconic figure also requires a high level of performance. But it's not as simple as animating a robot. They had to analyze Schwarzenegger's distinctive performance. They made a shot list of facial expressions and body movements from the first movie that gave them a target of what the digital character could look like. Of course, creative license was needed in terms of how stern or angry he should be at any given moment.

Overcoming the Uncanny Valley was a further analytic exercise. The eyes were important but so were the lips, the nostrils

and the tip of the nose, Stopsack says. So it was constant shot evaluation and fine-tuning it until it looked believable. "In the end, you deviate from the brute force analytic approach," Stopsack says. "We put a shot together and assessed what the weak points were and then we tried to improve on that. And it gets back to the collaborative iteration that goes on between the animator and the rigger. It comes down to the talent and seeing the same thing where it looks like Arnold and it looks like the original."

**Bill Desowitz is owner of Immersed in Movies ([www.billdesowitz.com](http://www.billdesowitz.com)), author of *James Bond Unmasked* ([www.jamesbondunmasked.com](http://www.jamesbondunmasked.com)) and a regular contributor to Thompson on Hollywood and Animation Scoop at Indiewire.**





Qbert's character required the most emotive animation, in addition to the layers of retro-inspired effects.

# Bringing Depth to *Pixels*

Sony Pictures Imageworks deviates from the photorealistic norm to bring classic 1980s arcade video-game characters to 3D life. By Bill Desowitz.

For Chris Columbus' *Pixels*, in which alien invaders take the forms of iconic video-arcade characters, Sony Pictures Imageworks had fun departing from its usual photorealistic visual-effects approach.

The studio created nearly 20 characters, including Qbert, Smurf, Space Invaders, Tetris and Zorex Game Machine; along with various environments, vehicles, props and destructive mayhem. Additionally, there were three shared characters created by other visual-effects companies, including Digital Domain 3.0.

Naturally, the filmmakers sought a vintage, pixelated look in keeping with the 1980s videogame vibe. Sony therefore created an in-house system for converting characters from 2D pixels to the 3D equivalent: voxels. There's light energy, particle formations, deconstruction and reassembly and dissipation after destruction. And as far as visual effects, there are simulations for fire, smoke and liquid.

"We wanted to live in a world that was threatening and real but also fun and otherworldly," says SPI visual-effects supervisor Daniel Kramer. "They also wanted to stay away from the LEGO or plastic looks, and Chris Columbus wanted something unique."

## Complex Tech, Simple Look

But it was a challenge creating such low-tech simplicity, so Sony developed a new pipeline for the voxelization, in collaboration with production visual-effects supervisor Matt Butler.

"We would build a smooth model because it was too time-consuming to have the modelers place each voxel exactly as it was," says Kramer. "And we wanted it to rebuild as it was going through animation, so straight modeling and rigging wasn't going to work. We didn't want our voxels to deform or crash through each other. And then, as opposed to processing through our Houdini effects pipeline, we built tools to break up the models as

voxels through a volume."

Animation supervisor Steve Nichols led the character development to translate the 2D game action; effects animation supervisor Charles-Felix Chabert and effects animation lead Pav Grochola developed the character animation destruction pipeline, along with much of the destruction techniques for cars and buildings; and digital effects supervisor John Haley oversaw lighting techniques and look-development of the cubes and characters, as well as the overall character pipeline.

"We could get an approved look but then the animation became a real challenge. One way was the characters could be turned on or off while moving through a static voxel field (rebuilding every single frame) depending on if they intersected that model or not. The other way was to bind those voxels into different spaces. For example, make the head or arm one space so that all the voxels associated with them would rotate together. Different techniques were created for specific characters," Kramer says.

"If I were to do it all again, I probably would've done more binding than not, partly because we found it so difficult to light the characters," he continues. "If you don't turn the cubes, they never change orientation in relation to the sun or the lights in the room. But if we did more of a parented approach, the cubes now rotated and it was easier to integrate them into the world because light fell on them more predictably."

Another idea that harkens back to videogames was making the characters look like they are illuminated by a CRT. Sony added a light energy effect, so that each cube appears to have a power source inside it. Then they built little digital-looking circuit board patterns or other textures that would go on the outside of the cube, and the light would burn through and create interesting patterns. This was perfect for night sequences.

## Lighting for Day

However, one of Sony's biggest lighting challenges was the final battle, which takes place in broad daylight.

They had to make these self-illuminating characters stand out and look interesting. "What we ended up doing was, rather than having every single cube illuminate, we used brake lights as a model," Kramer says. "We found that as long as there was contrast and cadence to the lighting you were able to understand what was going on."

Qbert, one of the few alien allies, had to emote more than the others. "And by animating smooth-shaded characters first and then rezing down into blocky shapes, you naturally lose detail," Kramer says. "So there was a lot of experimentation to find the optimal voxel size. For Qbert, we were able to go large enough so that he looked fun and was able to emote."

Rather than having all of the cubes accumulate after being destroyed, Sony came up with a dissipation effect with Digital Domain. "Once those cubes disassemble and hit the ground, they would subdivide further into almost particle size and those particles would evaporate like cigarette smoke. We made our own internal rule that when characters are hit, if they were part of the aliens, they would disassemble. But if they attacked a car and the car voxelated, then they would lose their light energy and disappear into a solid block," Kramer says.

"We've never had a show where every single character goes through the effects department at quite that level. Luckily, we were able to get it down to an automated workflow for the most part," Kramer says. "But there were times when things didn't look right and a voxel had to be tweaked, especially with Qbert where you wanted to get more emotion from him and connect with his eyes. But for the attacking characters, the automated process worked great."

**Bill Desowitz is owner of Immersed in Movies ([www.billdesowitz.com](http://www.billdesowitz.com)), author of *James Bond Unmasked* ([www.jamesbondunmasked.com](http://www.jamesbondunmasked.com)) and a regular contributor to Thompson on Hollywood and Animation Scoop at Indiewire.**



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# Tech Reviews

by Todd Sheridan Perry

## Substance Designer 5

**S**ubstance Painter by Allegorithmic is a favorite tool in my current toolbox. It allows quick and effective texture development and prototyping with very little pain. But, I've found that it's time to level up – with Substance Designer 5.

If you are familiar with Substance Painter, you know that there is a library of shaders that effectively build complex textures using maps on top of the UV channels in the models. Things like normals, ambient occlusion, curvature and such, drive how the dirt, grunge, scratches, etc., are calculated. Neat stuff. But these shaders are forged in the depths of Substance Designer.

As a precursor, I have to caveat that SD is not a piece of software to texture models – that's Painter. Instead, it is a development tool to create looks and tools to make texturing faster. And not only in Painter.



If you use the recent versions of Maya, Max, Modo, Unity and Unreal Engine, as well as Cinema4D through Substance Engine, you will notice that Substance is an option in your hypergraph/material editor. And it's through here that you access the magic conjured up in Designer.

Substance Designer 5 has incorporated some extremely powerful tools that may explode your brain. The most significant and involved is the Pixel Processor, which is like a crazy mix between Houdini, Nuke and maybe Visual Studio. In very simple terms, it provides a way to create custom processes that act on a per-pixel basis. By hooking math functions together, new procedural tools can be made without diving into formal programming and using SDKs. Essentially, Allegorithmic is offering the user a way to customize their toolset to meet their own needs.

In the same vein, Substance Designer 5 has a Mask Builder. The masking toolset is deep enough already, but Mask Builder is a node that can take other driving parameters like curvature and normals, for example, along with other masks to build brand new masks.

As a way to solve texture seams often present with mapping through UV coordinates, a TriPlanar node creates and blends mapping on three different axes. It modifies the mapping on the model, and then remaps and reapplies the texture. This is great for Designer's procedurally generated textures like noise, grime, rust, etc., where we have less control of where the textures will be placed. An invaluable tool, in my humble opinion.

Other, smaller, but no less important new features include: a vector warp to drive distortion using normal or flow maps, distance/edge detection nodes, a dependency manager to locate and re-hook maps and resources, a Bevel Node to smooth transitions on hard edges in textures – especially helpful for bump and normal maps, and to expand the

already powerful Baking features, you can exclude objects by a subname, which prevents things like unwanted occlusion, and a Transfer Texture feature which will re-render a

texture to appropriately fit a new UV map.

All these tools combine to create an extremely versatile and powerful tool.

Out of this, I suspect that a new breed of artist will emerge (if they haven't already), known as Substance Designers. If the subscription-based Substance Database is any indication, the user base is vast – and growing.

## Vue Infinite 2015

**T**here is a huge demand for digital environments in the visual effects world. I mean, from every budget, every format, every genre, there is a need to create new places for our heroes to journey. And those places could be fantastical, alien, futuristic or just simply needing to be in a location that was unavailable to shoot in. This demand is met in a number of different ways including homegrown internal tools, matte paintings and plug-ins.

Among the leaders in off-the-shelf tools has been E-On Software and their flagship, VUE. Now after 15 years, VUE has grown into a mature piece of software that has become a staple in the majority of visual effects houses around the world.

In VUE 2015, most of the updates lie under the hood in the programming. Pre-render scene preparations are faster in general, but specifically for the infinite terrains and ecosystems. The speed propagates its way into the preview rendering as well. This definitely helps for the photorealism that VUE is known for, but VUE 2015 introduces a library of non-photorealistic render presets to create line, chalk and other painterly effects.

As delightful as optimization is, I'm most excited about how VUE fits into the workflow with other software. For a while now, VUE xStream creates a conduit between 3ds Max, Maya, Softimage, Cinema4D and Lightwave, pushing the scenes from VUE into the other platform to be rendered in a hybrid fashion between VUE's renderer and the native renderer. But E-On has been keeping up with the times. One can export information as Alembic files, or over to ZBrush for sculpting through GoZ, or Disney's PTX format for texturing objects. And import has been expanded to bring in more formats for geographical data (DTED, SDTS/DDF, GeoTIFF) so you can bring in actual physical locations. On the compositing side, VUE supports multipass rendering in the EXR 2.0 format, and E-On has even created a Nuke script to break out the passes for you for tweaking the composite post render.

Finally, E-On has joined the masses of companies going with a subscription model. After your initial purchase, you can opt to subscribe, which will maintain your version and cover your upgrades. Along with this, you can pick your flavor of VUE depending on your needs ranging from the full xStream version to the Esprit version for those just getting the hang of it.





## Plant Factory Producer

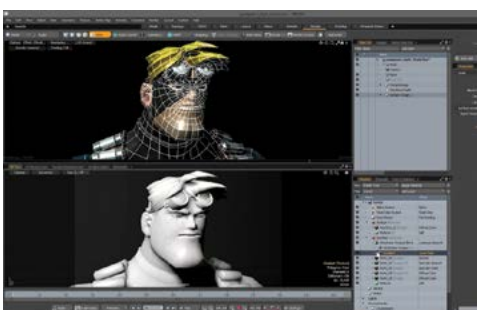
As a compliment to VUE, E-ON has Plant Factory, which, like VUE, comes in a variety of flavors to meet your production needs. Plant Factory Producer is the top of the line and includes more advanced functionality to help with pipeline integration, plant animation, and rendering. However, most of the base functionality is the same between versions – and that is to create plants and foliage.

Plant Factory takes a number of approaches to creating plants. First is manually painting it from scratch. Quite literally, you take your stylus and draw out curves that become trunks, branches, and leaves. Once built, you can dive into the construction graph and start tweaking nodes to refine the plant.

You can also build plants from components of already built plants. Plant Factory already comes with a slew of plant options, but additional ones are available for purchase at the online Plant Factory Nursery. Each of the subcomponents of a plant (branches, leaves,

etc.) can be accessed and Frankensteined into a brand-new plant type, or at the very least a variant.

Finally, if one wants to get hardcore, one can build procedural plants. Through a system of Houdini-like nodes, you can assemble a new tree (or dive into one you've made).

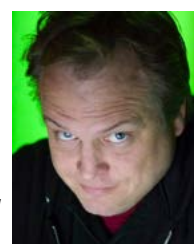


The advanced graph lets you link up parameters to parameters so that modified nodes propagate through the entire structure of the tree. Things like height, for example, could be fed into leaf color or size, so that the taller the tree, the more purple the leaves would become – if you wanted purple leaves.

Once you have what you want, the plant can be exported to any number of formats with all the good stuff like subdivision supported quads and pushing mapping to a second UV layer for isolated or detailed mapping. So, models could be built and then imported as geo – or bring it directly into VUE. Animation in Plant Factory Producer is also exportable in Alembic or FBX.

Between the ability to create new species and buy new one from the nursery, the foliage world is your oyster.

**Todd Sheridan Perry is a visual-effects supervisor and digital artist who has worked on features including *The Lord of the Rings: The Two Towers*, *Speed Racer*, 2012, *Final Destination 5* and *Avengers: Age of Ultron*. You can reach him at [todd@teaspoon-vfx.com](mailto:todd@teaspoon-vfx.com).**



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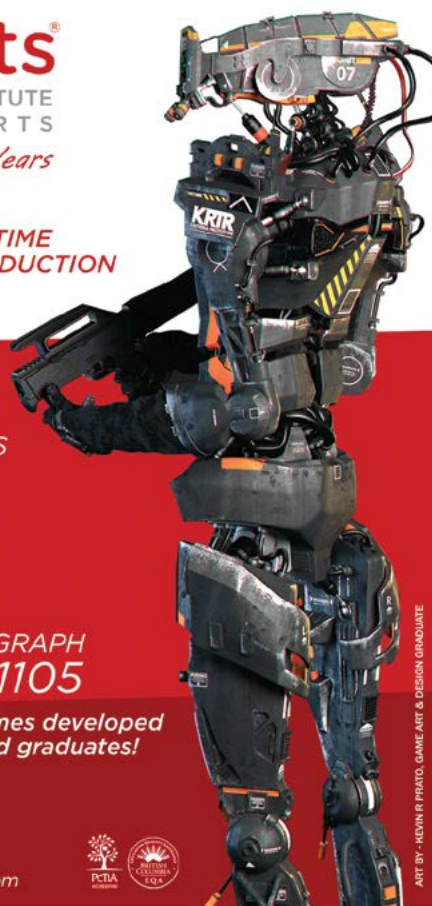
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***"We make your ideas physical"***

# A Sharp-Dressed Turn

Series directed by *Gundam* creator Yoshiyuki Tomino lives up to the franchise's legacy despite a few bumps in the road.  
Review by Charles Solomon.

**Turn A Gundam:  
DVD Collection, Part 1**  
(Sunrise: \$49.99; 6 discs)

**Y**oshiyuki Tomino's *mecha* series *Mobile Suit Gundam* premiered on Japanese television in 1979 to such poor ratings that it was canceled before completing its run. But when three feature-length compilations were released theatrically in 1981 and 1982, they proved so popular, near-riots broke out in Japanese toy stores as fans fought over *Gundam* model kits.

More than three decades later, *Gundam* ranks among the most successful franchises in anime history, encompassing more than 25 television series, 11 features, several OVAs and an IMAX featurette. In 2009-2010, a 59-foot "life-size" statue of a *Gundam* Mobile Suit was displayed in Tokyo and Shizuoka, marking the 30th anniversary of the first *Gundam* plastic model kit. According to some estimates, 10 of those kits have been sold for every man, woman and child in Japan.

The success of *Gundam* helped to create the modern anime fan scene and transformed the *mecha* sci-fi genre. The dumpy robots in *Tetsujin 28-go* (known as *Gigantor* in the United States) and other early series were remote-controlled contraptions that adolescent boys treated like a cross between a helpful friend and a pet.

## High-Tech Fighters

Tomino's *Gundams* fuse elements of an oversize space suit and a one-man space ship into a fantastic machine that resembles a baroque suit of samurai armor. Teenage pilots used a combination of mechanical devices and psychic bonds to control them. Although the Mobile Suits boast an impressive array of

guns and other weapons, battles are often resolved in high-tech sword fights. These duels may take place in outer space, as the *Gundam* pilots defy gravity and physics in flamboyant hand-to-hand combat.

Like George Lucas' Galactic Empire, the *Gundam* cosmos enabled its creator to explore politics, evolution, ecology and prejudice. The franchise grew so vast, it had to be split: Most of the adventures take place as part of the storyline called "The Universal Century," while some others, including the newly reissued *Turn A Gundam*, are set in the continuity of the "Alternate Universe."



Tomino himself served as chief director of the 50-episode broadcast series *Turn A Gundam*, which was created in 1999 as part of the 20th anniversary "Big Bang" celebration of the franchise. It was the last *Gundam* done on cels. In an unusual artistic gesture, Tomino invited American artist Syd Mead to design the white Mobile Suit hero Loran Cehack pilots. (The head of the suit looks more like a Greco-Roman helmet than the traditional Japanese *kabuto* of most *Gundams*.)

## Culture Clash

*Turn A Gundam* centers on divided loyalties and the desire of a reluctant warrior to serve


as a peacemaker. Loran is member of the Moonrace, the part of humanity that abandoned the planet for its satellite 2,000 years earlier. He's one of a trio of teenagers sent to



Earth to see if the Moonrace can return to its ancient home. In the intervening years, the people of Earth have lost much of the sophisticated technology they once commanded. Loran deals with steam locomotives, propeller planes and primitive automobiles that belong to people who wear late 19th century costumes.

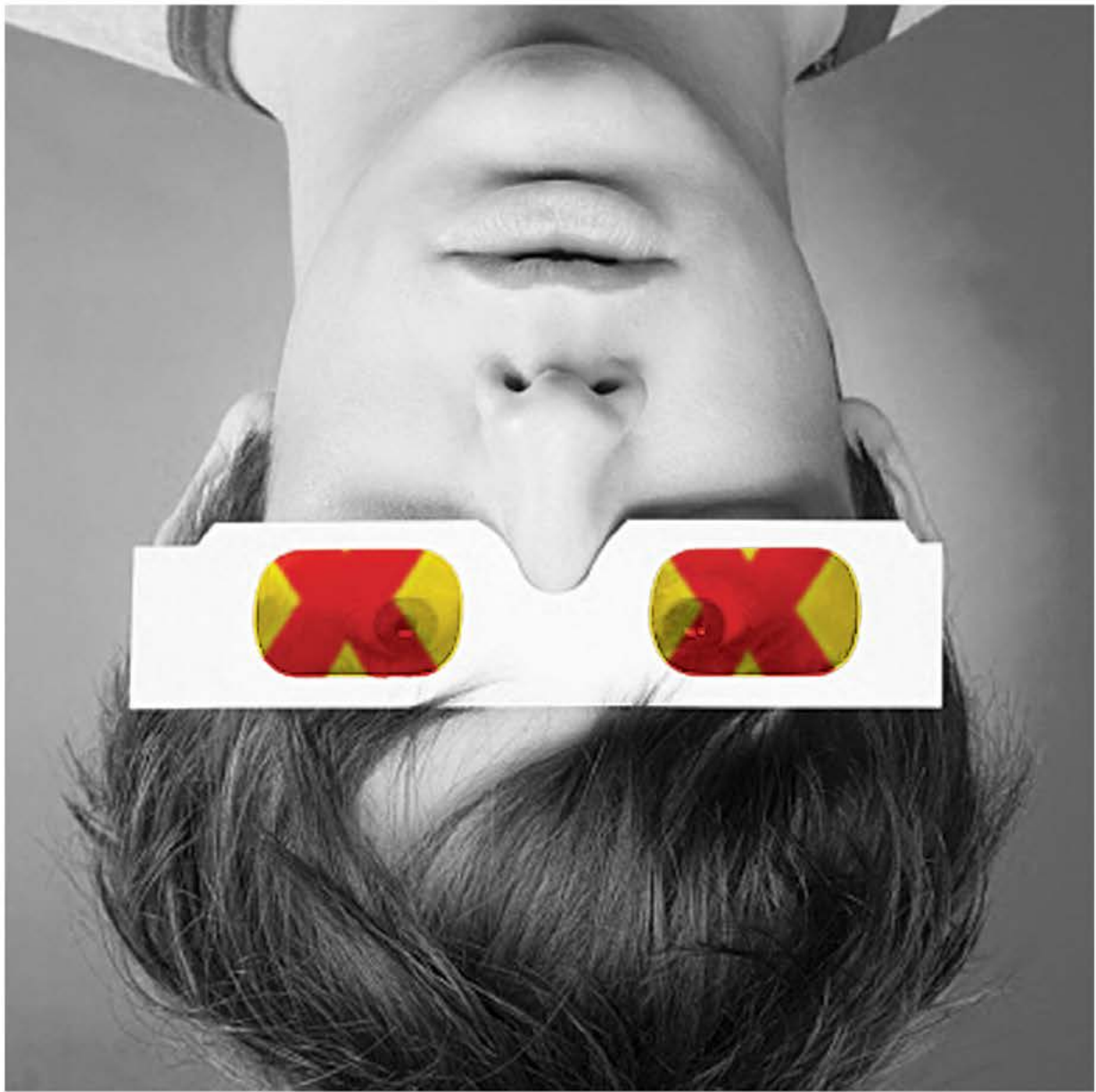
Queen Dianna Soriel decides it's time to return to Earth before negotiations over where the Moonrace will live have been completed. The violence quickly escalates, and Loran finds himself torn between his own people and his friends on Earth, especially Sochie and Kihel, the daughters of the prominent Heim family. The Earthlings would

quickly succumb to the sophisticated weapons of the Moonrace if Loran didn't stumble onto a mustached white Mobile Suit that's a relic of the "Dark History."

At times, the animation in *Turn A Gundam* is surprisingly crude – the two-legged "Wadom" piloted by invading Commander Poe has an oddly jerky walk. Fans have not embraced Loran the way they have the five pilots in *Gundam Wing*. But, it remains an interesting installment in one of the most popular and longest-running franchises in anime history. Footage from *Turn A Gundam* was later recut into two theatrical features, *Earth Light* and *Moonlight Butterfly*. 



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# The Dog Discs of Summer

Well, only Jake the Dog. But also Oh the alien, Usagi the Sailor Scout and whatever monstrosities got cooked up in Robot Chicken. By Mercedes Milligan

## Home

[Fox, \$29.98]

**D**irected by Tim Johnson (*Over the Hedge*, *Antz*) and based on *The True Meaning of Smekday* by Adam Rex, DreamWorks Animation's solo 2015 release centers on adventurous young human girl Tip (Rihanna) and her unlikely road trip buddy: an outcast alien named

Oh (Jim Parsons). Together they must evade the alien Boov trying to hunt them down and find their way "home." The voice cast also features Steve Martin and Jennifer Lopez.

Special features include Best Party Ever! intro, Party Play All "bonus meter," Shake Your Boov Thing dance video, music video and sing-along video for Jennifer Lopez's "Feel the

Light," Boovy Jukebox and Oh's Party Planning Tips. The Blu-ray combo (\$36.99) gives you even more reason to put your hands in the air like you just do not care, with This Is Being Boov, *Almost Home* short, Testing Lab, deleted scenes and Be an Artist! with animator Andy Erikson. Smek-tacular!

[Release date: July 28]



## Adventure Time: The Complete Fifth Season

[Warner, \$29.97]

**C**artoon Network's number one show keeps on keepin' on thanks to creator Pendleton Ward and his talented team, and now you can take home season five in all its 52-episode glory. Highlights from the 2012-2013 run include the Emmy nominated episodes "Simon & Marcy" and "Be

More," as well as fan favorites like "Jake the Dad," "Bad Little Boy" and "Frost & Fire."

Joining stars Jeremy Shada and John DiMaggio this season are returning talents Emo Phillips, Neil Patrick Harris, Maurice LaMarche, Weird Al, Ron Lynch, Lou Ferrigno, Andy Samberg and Mark Hamill, to name a few. And fresh guest stars include Kristen Schaal, Aziz Ansari, Paul F. Tompkins, Donald Glover, Cloris Leachman,

Marc Maron, Levar Burton, Lena Dunham, and many more we will refrain from mentioning in case you are reading this out loud and are starting to get dizzy from lack of oxygen. Plus, you also get animatic clips, "Special Snail Hunt" and the "Adventure Time Forever" featurette on both the four-disc DVD and two-disc Blu-ray (\$39.99) versions.

[Release date: July 14]



## Robot Chicken: Season 7

[Warner, \$24.98]

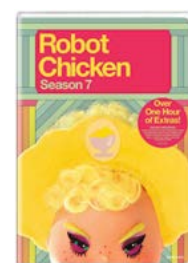
**W**ith a season premiere episode that features a wild puppet orgy, you know the Stoopid Buddy Stoodios crew are in top form with season seven. In case you already blocked out the memories of how your childhood was compromised by

the smash-hit stop-motion show last year, just know that Seth Green, Matthew Senreich and co. took Adult Swim viewers on irreverent journeys from Narnia to North Korea, lampooning everyone from Ben Franklin to Woody Woodpecker along the way. Like they do.

Some of the top-rated episodes this season include "Stone Cold Steve

Stone Cold," "Victoria's Secret of NIMH" and of course, "Bitch Pudding Special." The two-disc DVD set boasts over an hour of bonus content including commentary on all 20 episodes, an extra Christmas special with commentary, featurettes and sketches swept up from the cutting room floor.

[Release date: July 21]



## Sailor Moon R: Season 2, Part 1

[VIZ, \$44.82]

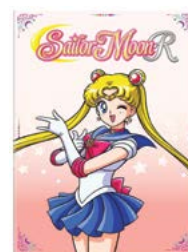
**T**he second season of the 'R' series begins after an epic battle when the Sailor Guardians are called back to action to fight powerful new enemies. Ail and An are alien siblings bound to the mysterious energy-devouring Makai Tree. And the Black

Moon Clan, led by Prince Demande, has the power to destroy all of future Crystal Tokyo! Things get complicated when a mysterious pink-haired girl falls from the sky, demands the Legendary Silver Crystal, and claims Mamoru for her own!

This installment of Toei's animated series based on the *shoujo* by Naoko Takeuchi is collected on three discs, containing 22 episodes with English

and Japanese audio plus English subtitles. If you really want to get your otaku on, opt for the six-disc Limited Edition Blu-ray combo set (\$79.98), which comes with a special chip-board case to hold parts one and two, a 96-page art booklet and special features including interviews with the voice cast.

[Release date: July 14]



## Honorable Mentions:

### .hack//G.U. Trilogy

July 21

[FUNimation, \$29.98]

### Pound Puppies: Pick of the Litter

July 14

[Shout! Factory, \$12.99]

### The Snorks: The Complete Second Season

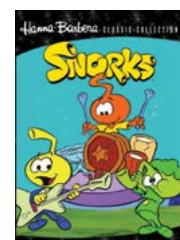
July 7

[Warner Archive, \$21.99]

### Teenage Mutant Ninja Turtles: Return to NYC!

July 14

[Nickelodeon, \$14.98]





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